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SIGNS OF GOD IN THE WORLD

Lectures and Addresses
Volume I

BY

JOHN P. D. JOHN

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To

My Wife

Whose Devotion to Principle
Loyalty to Conviction
and
Courage in Duty
Have Been My Inspiration;

Whose Gentle Womanhood
and
Tender Motherhood
Have Hallowed Our Happy Home.

PROEM

THESE lectures and addresses and those in the companion volume, "The Worth of a Man," have been delivered before various audiences in the United States and Canada. In response to requests the author now gives them to the general public in the present form. They appear in these volumes substantially as they were delivered to the people.

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PRELIMINARY

DURING the latter half of the nineteenth century the pendulum of religious thought swung to the end of the arc of materialism. It is now on its return vibration. What the other extremity of the arc will be, it is impossible to say; but it seems as if it might terminate among the fads and fancies of a spurious spiritism. It is well for us to take a steady look and discover, if possible, what is in the middle of the arc; for, sooner or later, after successive vibrations, the pendulum will come to rest in a vertical position. What will be some of the fundamental religious truths towards which the vertical pendulum will point?

In the first five lectures following, I shall endeavor to show, in part, what the early years of the twentieth century have to say concerning the presence of God in the world.

In the first of the unified series of five lectures, I shall enlarge the scope so as to include "Signs of a Human Soul," as well as "Signs of God," in the Cell.

SIGNS OF GOD IN THE WORLD

SIGNS OF GOD AND A HUMAN SOUL IN THE CELL

A Glimpse Through the Microscope of God and the Soul

THERE are two questions that have been asked in all ages and by all men. The first is the question of human reason: "Is there a God in the universe?" With rare exceptions, reason has brought but one reply: "There is a God, because there is a universe."

The second is the question of human instinct: "If a man die, shall he live again?" In the heart of every human being of normal development, as he has stood face to face with the inscrutable mystery before him, spontaneously has arisen this question of questions: "If a man die, shall he live again?" Inscribed on the tombstones of unseen graves in human hearts, wherein hope lies buried, and over which love weeps its holy grief, is this ever-recurring question, "If a man die, shall he live again?"

With comparatively few exceptions, there has been but one answer to this question. The great heart of humanity, speaking forth its innermost instinct, proclaims with unfaltering tones, "If a man

die, he shall live again." The philosopher of Athens said before his death, "You may bury me, if you can catch me; to-morrow I shall be with the immortal gods."

Such has been the general, though not universal, answer to the question. When you go through the forest, you will find here and there a tree of monstrous growth, whose gnarled trunk bends back from its upright course and whose leaves look down upon the earth; but the countless trees of the forest look towards the heavens. Now and then in human history, an instinct of abnormal growth fixes its eyes on the clods, but the unfettered instinct of humanity looks toward the stars.

What does the microscope have to say to these two questions of the head and heart?

I shall lay down a proposition which every man of sound mind is compelled to accept, viz., "*The whole can not be greater than the sum of its parts.*" *You can not stretch two and two into five.*

I.

What does the microscope see of an immaterial God?

(1) If we place a piece of living tissue under the microscope, we shall see three things:

1. *Nutrient matter.* This is the food we have eaten. Through the process of digestion, it has been reduced to a state in which it is capable of being

converted into muscle, bone, nerve, and the other tissues of the body.

2. *Formed matter*, or the characteristic substance of bone, muscle, nerve, and the other tissues.

3. *Living matter*, This exists in minute particles diffused throughout the entire body. These particles vary in size from $\frac{1}{100000}$ of an inch in diameter to $\frac{1}{120}$ of an inch. The usual size is about $\frac{1}{4000}$ of an inch.

One fifth of the mass of our bodies is made up of these microscopic living particles. Each minute particle has a separate, independent existence.

What are these little living particles? They are the builders of the body. They build the brain, the eye, the nerve, the bone, the muscle, the veins, the arteries, the lungs. Fasten your attention on this fundamental fact: They build the body.

This living matter is of the same chemical composition in every part of the body. Further, it is of the same chemical composition in all living bodies. The living matter in the tree, the flower, the horse, and the man is identical in chemical composition. These infinitesimal living particles are the units of the body and are called cells.

A complete cell has a wall of formed material, within which is the living matter. The formed material, or cell wall, is supposed to result from the death of the living matter.

Conceive a minute, rounded mass of pure living matter. It begins to die at its surface, and in its death is converted into formed material, which re-

mains as a thin shell around the remnant of living matter within. If this process should continue without a fresh supply of living matter to the interior, the cell would soon become entirely formed matter; all the living substance dying, and being thus converted into formed substance. But when the cell wall begins to form by the death of the adjacent living matter, the nutrient substance from the blood-vessels permeates the cell wall, flows to the living matter in the interior of the cell, and is converted from dead nutrient material into fresh living material. The cell will, therefore, increase in size, partly by the addition of formed material to its surface, and partly by the creation of living material at its center.

When it reaches a certain size, it begins to subdivide; a minute peninsular mass begins to form, joined to the main land, or continental cell, by an isthmus of living matter. The peninsular mass increases in size, and the isthmus diminishes, until the peninsula is set free, and becomes an island cell in all respects like the main land from which it was produced. This cell, like its parent, grows to a certain size, and then throws off another cell like itself. Thus the process continues.

Whence do these cells originate? It is the verdict of the microscope that every cell comes from a pre-existing cell. Fasten this fact in your memory: No cell except from a cell.

When Prof. Loeb a short time ago announced that he had obtained life from purely mechanical

processes, he produced a profound sensation, and the press of the country chronicled in flaming headlines that the spontaneous origin of life had at last been demonstrated. But Prof. Loeb did not claim to have found a case of the spontaneous origin of life, for in his experiment he started with life. All that he claimed was, that he had mechanically produced life from the cell of one sex alone. When he succeeds in producing life from nothing but unliving matter, it will be time to announce the spontaneous origin of the cell.

Prof. McDougal recently startled the biological world with the announcement that he had produced a new species by purely mechanical means. But he did not claim to have reached this remarkable result from unliving matter, but from existing life.

We are, then, brought squarely back to the fact, *no cell except from a cell.*

Whence the first one? Trace our cells back to those of our progenitors. Trace theirs, if you wish, by a long and tedious journey down the declivity of evolution to those of their hypothetical progenitors,—the lower animals. Trace the cells of the animals down the steeps of evolution until you arrive at the simplest form of life, out of which, by hypothesis, the whole world of life has been developed. Whence came those original cells? Had they existed forever? Science answers, "No." Science asserts that there was a time when no life could exist on the earth.

There was a time, then, when not a cell existed. Look again upon the stern verdict of biological history: *No cell except from a cell.* Whence, then, came the first one?

At this point the materialist does what he unequivocally condemns in the religionist. The plank of knowledge being too short to bridge the chasm between living and unliving matter, he deliberately steps out on the plank of faith! "Who," says the materialist, "will set limits to the possible play of the molecules in a cooling planet?" Somehow in the turmoil of a cooling planet the molecules may have fortuitously rushed together in such proportion as to give birth to the original cell! Can there be a more notable exercise of faith than this?

Now, if the fortuitous concourse of dead molecules could give birth to life, how much more ought the skill of modern chemistry to be able to produce it! But science reiterates the truth that there are now no cases of spontaneous origin of life; that is, there is no life except from the pre-existing life.

Right here we are met with the remarkable statement that it is not necessary that life be born now from dead matter. If nature, originally, by a mighty effort gave birth to life from dead substance, it is as unnecessary that she continue the process now as that the savage should continue to rub his sticks together to produce fire after he has obtained the spark. The spark being obtained by the unusual effort, new fire may be more easily kindled

from the existing fire. Life being born by an unusual throe of nature, new life may be more easily begotten from the existing life.

Now, is it not true that sticks, when rubbed together, produce the spark, even though the world be full of fire? And when the molecules of dead matter clash with each other, they ought to give birth to life, even though the world be full of life. But the stern word of science still is, *life from life only; a cell from a cell only.*

Physical and chemical forces, then, being unable to produce living from unliving matter, the question again recurs: Whence the first cell? And also whence the force in an existing cell that can raise dead matter to life? Matter says, "It is not in me." There is such force. If it is not in matter, it must be outside of matter. This force is in man and in all living organisms. Therefore, there is something in living organisms that is not matter.

Return to our axiom: "The whole can not be greater than the sum of its parts." You can not stretch two and two into five. Put two and two together, and before you can get five, you must add one. Put matter and its laws together, and before you can get life, you must add *One*, and that *One is God.*

(*2*) Let us now take another step. In this second step we shall be independent of the one just taken. I shall not in this stage question the spontaneous origin of the cell. Indeed, the time may

come when science will produce a cell from dead atoms. If so, I will glory in the truth of it, for it will only add to my admiration of Him, who could so stamp His truth in the atoms as to give them the "promise and potency" of life. The spontaneous origin of life can not drive God out of His universe, for the very spontaneity of birth is the immanence of God in the atoms. The argument that I have just completed will hold until some cell spontaneously appears; and then it will hold with equal force as the only explanation of the spontaneity itself.

But in this second argument, I shall not make any assumption concerning the origin of the cell. Let its origin be as it may, does it behave like matter? Fix your attention once more on the nature and functions of the living matter in the cell.

1. It is absolutely identical in composition in all parts of the same body, and in all bodies. In man, lion, bird, fish, reptile, tree, shrub, flower, and lichen, the living matter is chemically the same.

2. It is the builder of the body.

3. It is apparently structureless. It is unlike the structures which it builds. There is no muscle in it, but it builds muscle. There is no bone in it, but it builds bone. There is no nerve in it, but it builds nerve. There is no brain in it, but it builds brain. It is totally unlike the tissues that it builds.

Now, from this substance, common to all animals and plants, and chemically the same wherever found, come forth muscle, nerve, brain, bone, tendon, artery,

vein, capillary, horn, wood, bark, flower, leaf, and the countless products of life.

Imagine a number of undeveloped babes, in all respects alike. Let it be the first moment of their existence. They are totally destitute of knowledge. They are not even conscious of their own being. Suppose you are told that in this state of intellectual nothingness, they accomplish miracles; that out of this intellectual void one gives to the world Homer's Iliad; another, Milton's Paradise Lost; another, Cicero's Orations; and others, Hamilton's Philosophies, Mill's Logic, Butler's Analogy, Newton's Principia, Laplace's Mécanique Celeste, Beethoven's Ninth Symphony, Handel's Messiah, Haydn's Creation, Mozart's Twelfth Mass, Mendelssohn's Midsummer Night's Dream, the printing press, the steam engine, the telegraph, the telephone, the phonograph, —what do you say? You say that it can not be. You say that there is some unseen force behind those unknowing babes that has brought forth these works of immortality. And when you tell me that from the chemically same microscopic particles of structureless matter the countless and varied forms of life have come, I say that it can not be. There is some force behind the cell, but not of the cell, that builds up these infinite varieties of life.

Do you call it molecular machinery? But can the same machine turn out pins, needles, watches, plows, household furniture, railroad bars, nails, horse-shoes, pianos, French harps, printing presses, books, pen-

knives, reapers, and the million products of art? Further, can a machine, of its own power, turn out innumerable other similar machines with similar powers? Did you ever see a watch that could make a watch that, in turn, could make another watch, *ad infinitum?* Still further, can any machine turn out even its appropriate product without a machinist?

Molecular machinery and physical law can not turn out a single tissue. They lack a machinist. Two and two can not make five. Two and two and one make five. Structureless living matter and physical law can not build the tissues: *They lack One, and that One is God.*

(3) Let us advance one stage farther along our investigation. Here let us be independent of both the former steps. In this stage I shall not question the spontaneous origin of the cell, or its power to build the various structures of life. I now question merely its infallibility of knowledge. I question merely the proposition that it can never make mistakes; that it is so far-reaching in its wisdom as never to build a leaf where there ought to be bark; a root where there ought to be a branch; a fin where there ought to be a gill; a wing where there ought to be a beak; a nerve where there ought to be a bone; an eye where there ought to be an ear. My credulity is not so great that I can readily believe that a million independent and ignorant workers in different parts of the same body and in different bodies, should be so harmonious as never to clash.

It is said that no sound of instruments was heard in the erection of Solomon's Temple. When the materials were brought together, already wrought out and fitted, stone corresponded to stone, archway to arch, capital to shaft, column to pedestal, temple to foundation.

But did the workmen in the different parts of the quarry and forest have no concert of action? Did they have no plan? Did they hew out their timbers and cut out their rock with no forecast? And then, fortuitously, did rock fit rock and timber fit timber in the magnificent structure? Or, was there a master architect in whose mind the complete plan of the temple was pictured before the first blow was struck?

Here are a billion body-builders. Some are at work on a nerve who never heard of a muscle. Some are at work on a muscle who never heard of a nerve. Some are making eyes who never saw the light. Some are making ears who never heard a sound. Who taught these nerve-builders the nature of muscular fiber, that they should build nerve with the power and for the purpose of sending impulses? Who taught these muscle-makers the nature of nervous energy, that they should put contractility and expansibility into muscular fiber? Who taught the army of eye-makers the nature of light, that they should construct an eye with lenses adapted to receive it? Who taught the eye-builders of the fishes the principle of physics, that light passing from water obliquely into the eye

is not bent from its course so much as when entering it from the air, and charged them to make the crystalline lenses of the finny tribes so much more convex than those of the land animals? Who taught the heart-builders the principles of hydrodynamics; the lung-builders the principles of osmose; the ear-builders the principles of acoustics; the gland-builders the principles of secretion;—in short, who taught the countless processions of infinitesimal workers the vast fund of knowledge that touches upon infinity? The workmanship of these minute artisans gives unmistakable evidence of far-reaching design. Whose design? Not that of the busy workers, for every moment they are falling at their posts by the million.

The Cathedral of Milan was five centuries in building. The workmen who laid the first stone had long been in their graves. Generation after generation followed, putting their work in the imposing structure; and after sixteen generations of laborers had passed away, the magnificent edifice stood complete, *according to plan*, before the admiring eyes of the people. Whose plan? That of the armies of workmen who fell at their posts? Not so. In the year 1387 the picture of that building in its completeness stood out before the mind of the master architect.

What architect laid the plan of our bodies, and the plan of every living thing on the land or the sea, in the earth beneath us or in the air above us? Who teaches the life-builders, which every moment come

anew upon the scene of labor, to take the places of their predecessors, when, where, and how they shall work? Whose design? *Not that of the life-builders.*

Two and two can not make five. They lack one. Unconscious life-builders and blind physical law can not produce the complex structures of living bodies. *They lack One. That One is a Designer. That Designer is God.*

There is, then, in the universe a substance external to matter.

That substance is what we call spirit.

That Spirit is God.

II.

This being true, it is logically possible that there may be a substance in the human body external to its material organization. If so, it is the substance we call soul.

Is there a soul in man, or is there nothing in man but the clash of atoms? Are reason, choice, love, hope, pity, sympathy, joy, sorrow, grief, remorse, but the offspring of molecular commotion? Does the brain secrete thought as the stomach secretes gastric juice? And when the brain, like the stomach, disorganizes, will thought, like gastric juice, cease? In short, is there nothing in man but what we see on the exterior of his physical organism? Is there nothing behind the atoms?

The microscope looks behind the atoms and

sees enough to justify the declaration that there is a soul in man, external to his bodily organism, and essentially different in its nature from the atoms of his body, or from any possible combination of those atoms.

(1) The foundation on which microscopic science builds the distinct existence of an immaterial soul in man is *the continuity of consciousness*—the unbroken flow of identity from the cradle to the grave.

You are the same person to-day that you have been at every point of your life. You know that. Whatever you doubt, you are sure of that fact. You remember what occurred ten years ago. What is an act of memory? It is the calling up of a former conception. What is your act, when you remember? You call up a former conception. Whose conception? Your own. Then you must have lived at the time when you held this conception. Memory, then, necessitates self-consciousness. Self-consciousness necessitates self. The self of ten years ago and the self of to-day are one and the same.

What constitutes the self? The clash of atoms? Let the microscope respond. At no two successive moments in a man's life is his body the same. Several times a year some of the tissues of his body are completely changed. Every year he enters on his work with a body entirely new, unless we except a small portion of certain extremely durable substances; and if he live to a ripe age, he changes his body a great number of times.

What constitutes the self? The clash of atoms? But a new combination of atoms arises at each successive moment of life; and if the atoms that formed your body ten years ago were brought face to face with the present generation, they would be strangers to each other. But you recognize your former self as being absolutely your present self. During all this period the self has not changed. During this period the atoms have changed.

Therefore, the atoms are not the self.

An attempt is sometimes made to offset this conclusion as follows: The cells in which memory and consciousness are located, although being continually removed from the body, are replaced by other cells that are in all points like their predecessors. The quality in a cell which constituted memory is reproduced in succeeding cells.

In reply to this I have to say that it is mere dogma, for the microscope does not reveal its truth; and if it were a fact, the successive cells are not identical, but merely similar. You are not the similar self that you were ten years ago, but the same. If the cells were formed in perfect copy of their predecessors, they would still be different cells. Remove a page from a book and substitute another in its place. It is not the identical book. Remove page after page, and insert page after page, until the entire book has been replaced. It is a different book. What matters it though every new page have the same print on its face? It is a different book. What

matters it though every new cell have the print of its predecessor? It is still a different cell. But your self is the same that it was ten years ago.

Does the brain secrete thought as the stomach secretes gastric juice? Then the new brain must secrete new thought. For the gastric juice secreted by the stomach is not identical at any two periods. The only case in which it could be identical would be when, in the course of one's life, the identical elements might fortuitously return to the blood, and be again combined in the exact order of their previous composition. But you have thoughts to-day that are identical with those you entertained ten years ago, while your gastric juice is very different from that of ten years ago.

It is an axiom of mathematics that a constant product does not result from a variable multiplier. Thought, a constant quantity, can not be the product of molecular action, a variable multiplier.

In 1683, Roger Williams died, and his body was buried in the family cemetery. Some years ago, when the grave was opened, a strange transformation met the eye. An apple tree, growing in the vicinity, had sent its roots down deep into the earth. The root pressed open the coffin lid. It grew along the form of the dead body, spreading out into arms, fingers, and lower extremities, and silently robbed the coffin of its former inmate. The body was transformed into the root of an apple tree. Was that root Roger Williams? Up through the sap went

the atoms from the body of Roger Williams and appeared on the branches as apples. The grave-digger ate the apples, and a part of the molecular machinery that ceased its work when Roger Williams died was again set up in the brain of the grave-digger. Suppose every atom from the coffin had been transferred to the body of the grave digger, would he have become Roger Williams? Would the consciousness of Roger Williams have reappeared and the consciousness of the grave digger have disappeared in this exchange of molecular machinery?

The continuity and inexchangeability of consciousness in the presence of a ceaselessly changing molecular organism are Gibraltars, upon which an immaterial and continuous soul walks with Godlike tread.

Two and two and one make five. Molecular machinery and physical law and One make man, and that One is the Soul.

(2) I shall present you one more glimpse of the soul.

If it were necessary in the interests of science, I might bring before you to-day a living frog with its brain removed. It would be utterly incapable of motion, unless acted upon by an external agency. Imagine it here in the palm of my hand. Unless disturbed from without, it will quietly sit there without the slightest movement. As I turn my hand, it gradually climbs the inclined plane. When my hand

reaches a vertical position, the frog is found quietly seated on the top edge. I continue the motion until the back of my hand is uppermost, and the frog gradually goes down the inclined plane until it secures a permanent footing. If I reverse my movements, the frog does likewise, but it makes no motion whatever unless it is stimulated from without. I put a drop of vinegar on its right thigh. Instantly its right foot moves to the point of irritation and rubs off the vinegar. If I hold its right foot, the other is drawn around to remove the irritant. When I remove the vinegar, the frog is quiet. In other words, a brainless frog is a mere automaton. If I could replace the brain and restore the frog to its normal condition, it would immediately leap from my hand of its own accord, and without any external stimulus whatever. It would then be capable of self-movement. In other words, a frog with brains can originate movements, while the motions of a frog without brains are purely automatic.

A similar experiment with a bird would result similarly. A brainless bird will be motionless, unless stimulated externally. Throw it from your hand, and the resistance of the air will excite motion in its wings. It will fly in the direction which it happened to take at the start, until it meets some counter-resistance. This new external stimulus will give it a new impetus, and it will either drop to the ground, or continue its flight in a direction determined by the new resistance. A brainless bird is an automaton.

A bird with brains flies, ceases flying, or changes its course without any external stimulus.

You all know how a headless chicken behaves. Its violent contortions, which are usually, though incorrectly, supposed to be the result of pain, are entirely automatic. If its head could be quietly severed, without disturbing the other portions of its body, the headless chicken would make no manifestation whatever. It is only when some other portion of its body is irritated by external pressure that the violent muscular action is manifested. But a chicken with a head is master of its muscular apparatus.

A brainless man would also be an automaton. He would act only when acted upon by external agencies. Many of our actions are purely reflex or automatic. Gently touch the bottom of one's foot when he is asleep or intently engaged upon an interesting topic of thought. He will quietly withdraw his foot without being aware of the act. Gently touch with a feather the back part of one's ear when he is rapt in contemplation, and instantly, yet unconsciously, the hand will fly up to the ear to brush away the intruder. Put your finger on a hot stove, and before you feel the pain you will have automatically jerked your finger away. These motions, together with thousands of others that are unperceived, are purely automatic. Indeed, acts that are originally voluntary may, by long habit, become auto-

matic; such as the enunciation of sounds in talking or the action of the muscles in standing or walking.

Our actions, like those of the lower animals, are both automatic and volitional. Our automatic action is, perhaps, less varied; our volitional action is more varied. We are poorer automatons than frogs, but much higher volitional agents.

What does the microscope see of these automatic and volitional movements in man?

The microscope reveals two systems of nerves, called by physiologists *reflex* and *voluntary systems*, —or, which is the same thing, *automatic* and *volitional systems*.

Let me first describe in barest outline the automatic system. The description will be typical, rather than actual.

Here is a nerve at the surface of the body. Trace it through the tissues until it comes to a nerve-center in the spinal cord. When this nerve reaches the spinal cord, it spreads out into a brush of numerous fine fibers that end in the cells of the cord.

Now, starting out of the adjacent cells of the spinal cord we have another nerve with brush-like terminal fibers, which we can trace through the tissues till it ends in the cells of a muscle.

Look closely at these two nerves; one from the surface of the body to the spinal cord; the other from the spinal cord to a muscle. The infinitesimal fibers of the extremities of these two nerves in the spinal cord communicate with each other in some un-

explained way. The nerve coming from the surface of the body to the spinal cord is called *afferent;* the nerve going from the cord to the muscle is called *efferent;* and in the spinal cord their terminal fibers communicate with each other.

Now, excite the extremity of the afferent nerve at the surface of the body, or anywhere along its pathway towards the spinal cord, and the impulse is transmitted along the nerve to its brush-like appendage in the cord. In a way utterly unknown, the impulse leaps from the terminal fibers of the afferent nerve across an infinitesimal space to the brush-like terminal fibers of the efferent nerve in the cells of the spinal cord, and the efferent nerve carries the impulse forward to the muscle on which it terminates, and the muscle instantly contracts.

The process is wholly an unconscious one. The impulse did not reach the brain, and the order for the contraction of the muscle did not issue from the brain. The impulse of the afferent nerve was reflected by the nerve-center in the spinal cord and was sent along the efferent nerve to the muscle without going by way of the brain.

Such is the typical process of the automatic system of nerves, viz., the impulses are reflected by the nerve-centers of the spinal cord or certain other ganglia of nerve-cells; sometimes wholly without consciousness, but always before consciousness appears; and these impulses are, therefore, not volitional. Stimulus in an afferent nerve of the automatic sys-

tem appears as muscular motion at the extremity of the efferent nerve.

But this system of nerves never originates motion. Motion in the muscles, through the automatic system, must be originated from the outside. This system, in itself, is absolutely inert. Thus far, man is only an automaton. If the afferent nerve is not excited by some force extraneous to the nerve and extraneous to the spinal cord, the efferent nerve will have no impulse to send, and the muscle will receive no order to contract. Do not lose sight of the imperative fact that the automatic system is motionless and passive in the absence of the proper external agency to excite it. The apparatus of sight, hearing, taste, smell, touch, and temperature is wholly automatic. It must be excited by the appropriate external agency. Light sets in motion the automatic machinery of the eye; sound, that of the ear; odor, that of the nose; resistance, that of touch; heat, that of temperature. By no possible means can these agencies exchange functions. Waves of light will not affect the ear. Waves of sound will not affect the eye. And neither of these will affect either taste, smell, touch, or temperature. Let me still again insist that these external systems are automatic and beyond the reach of the will. We can not see in the darkness, hear silence, smell an odorless substance, taste a tasteless morsel, feel non-resistance, or experience the absence of temperature, however vigorously we may will to do so. These mechanisms are

passive and are only to be set in motion by the appropriate external causes.

This, then, is the automatic system in man, consisting of afferent nerves, groups of nerve-centers, and connecting efferent nerves.

Does the microscopic vision cease here? No. It boldly looks behind the brain itself and finds the other system of nerves that I have called the volitional system. Now, mark. There is complete similarity between the mechanism of the volitional and that of the automatic system. In both systems there are afferent nerves, groups of nerve-centers, and efferent nerves. In both systems, afferent nerves come from the surface to the nerve-centers, and efferent nerves, connecting with these afferent nerves, go out from the nerve-centers to the muscles. The resemblance is complete.

Now, if the automatic system is inert, so is the volitional system. If the automatic system can not originate its own motion, neither can the volitional system originate its own motion. If the automatic system, before it can manifest any change, must be acted upon by an external agency, so must the volitional system be acted upon by an agency external to itself, before it can manifest change. For one is no more inert than the other. Facts demonstrate that the automatic system is inert without an external stimulus. Therefore, the volitional system is no less inert, unless acted upon by an external agency.

Now, find the extremity of an afferent nerve at

the surface of the body, which connects with an efferent nerve in the cerebrum of the brain. Excite that afferent nerve. An impulse will speed home to the brain. But there it stops. It can not, as in the automatic system, leap across the infinitesimal space to the fibers of the efferent nerve in the brain. It brings the message, and its task it done. The efferent nerve is not excited. No message goes to the muscle. The muscle does not move.

Ah, but wait! The muscle does move. The efferent nerve has brought an order to the muscle. But the order did not come from the nerve-cells of the brain, when the afferent impulse first reached them. They waited for orders from a higher source. The orders came from a force behind the brain. That force is the Soul. The muscle of the volitional system is dead until the soul speaks.

An external agent is necessary to set in motion the automatic mechanism of the eye. *That agent we call light.* An external agent is equally necessary to set in motion the equally inert mechanism of the volitional system. *That agent we call the Soul.*

Right here I am halted with the objection that my argument proves too much, since it proves a soul in the lower animals; for the animal has the volitional as well as the automatic system of nerves. If my argument is valid, I am not responsible for what may be contained in the conclusion. If my premises are correct and my reasoning valid, the conclusion can contain nothing but the truth. We need not shrink

from the conclusion that there is something in the lower animals higher than matter, for indeed we are driven to this conclusion when we look at the facts. Whatever the psychic force in the horse may be, it is simply worth its face—no more, no less. And whatever the psychic force in a man may be, the same is rigidly true. But when we compare the achievements of a man with those of a horse, the two psychic forces will find their respective levels. So, we have nothing to fear from admitting the horse and the dog into the region of volitional forces.

The microscope, then, furnishes the same evidence of the existence of the soul that our senses furnish of the existence of an external world. Is there an external world acting upon the eye, the ear, and the various organs of sense? Then there is an external essence acting upon the brain.

But what of its immortality? Will the agent that sets in motion the volitional machinery continue to exist after the machinery has been taken down?

Do waves of light cease, when the eye is closed in death? Does the air cease to vibrate when the ear has decayed in the grave? Then, by analogy, which is the universal mode of argument, the substance that sets in motion the volitional machinery may exist after the brain has returned to dust. There will be an external world when there are no eyes; and there may be a soul when there is no brain.

Still, when we contemplate the growth of the soul during a human life, we sometimes pause and

wonder if the end of the body may not also be the end of the soul. Since the soul appears to grow with the development of the body and to decline with its decay, may it not be that it will entirely cease its activities with the death of the body?

The reply to this question should be evident from what has already been said.

The body is merely the instrument of the soul. The skill of an artist does not cease when his chisel breaks. The work that he does depends upon his chisel, but his skill remains after his instrument is gone.

The musician sits before his piano. Day after day, year after year, he applies himself to his work. His skill increases, but his piano grows old. The keys become yellow. The frame shrinks. The pedal breaks. The wires snap. Finally the old instrument is laid aside for a new and better one. But his skill is most acute at the last, although he can wake no music in the worn-out instrument.

And who shall say that the soul has lost its power when the key-board on which it has so long been accustomed to play has become worn? And who shall say that the skill of the soul ceases when the key-board falls to wreck? And who can set limits to the instrument that may then be set before it for its immortal fingers to strike?

Some pianos have such small key-boards that the music of the masters can not be played upon them. Other things being equal, the value of a musical in-

strument depends upon the range of its key-board. Upon two or three octaves, the variety of music is limited. Upon the full seven or eight octaves, the variety is indefinitely increased. Connect a dozen instruments with one key-board, as is done in the grand organ, and the variety is beyond limits. On such an instrument as this, the music of the masters stirs us to the depths.

If the soul can wake such melodious conceptions as the Iliad, the Æneid, Paradise Lost, and Hamlet, when playing on the instrument of the senses with only six keys, imperfectly tuned, what shall be the anthems of thought when it shall sweep the key-board of an instrument whose strings are never untuned, and whose keys outnumber the stars of heaven!

SIGNS OF GOD IN INSTINCT

Animal Intelligence

THERE are three classes of actions in which means are adjusted to ends; or, in other words, in which intelligence, either direct or remote, is manifested:

1. Reflex actions, and, therefore, not volitional, and generally beyond the sphere of consciousness.

2. Volitional actions, and, therefore, conscious; but actions in which the doer does not perceive the relation of the means to the end. These are sometimes called blind actions.

3. Volitional, conscious actions, in which the doer perceives the relation of the means to the end.

I shall call the first class reflexive; the second, or so-called blind actions, instinctive; and the third, intelligent, or rational. I shall illustrate each of these kinds of action, in all of which, means are adapted to ends.

1. Reflex action. The beating of the heart is an example. It is not volitional, and, except in abnormal cases, it is beyond the sphere of consciousness. Nevertheless, in the beating of the heart, means are accurately adjusted to ends. Indeed, means are here intelligently adjusted to ends, although the intelli-

gence is not that of the animal itself, and although we may be unable either to locate or account for it. There is a complicated series of movements performed by the heart, each adjusted to the movements preceding and following, and all looking toward the circulation of the blood through the adapted channels of the body. There is, or has been, intelligence somewhere back of these adaptations, but it is foreign to the individual himself. So far as the individual is concerned, whether the animal be higher or lower, these actions are automatic, produced by appropriate stimuli, and contain none of his own intelligence. They are, in a sense, intelligent actions, but the intelligence is removed beyond the sphere of the individual. Doubtless the majority of human and animal actions are of this kind. In this class would be included the chief processes of digestion, respiration, and circulation. Moreover, many actions which originally involved the exercise of the individual's own intelligence become reflex by habit; such as the play of the muscles in walking, speaking, and the like. The original intelligence requisite in these actions no longer appears; and so far as the individual is concerned, the actions become automatic and unintelligent. This well-known fact naturally raises the question whether all automatic and unintelligent actions may not originally have been intelligent, the actions having been modified by habit, environment, and heredity, until they have become wholly automatic. It is, perhaps, equal folly to assert positively

the truth or falsity of this hypothesis. So much for reflex action, in which means are fitted to ends, but which involve no element of intelligence on the part of the animal, and no consciousness either of the fitness or of the action itself.

2. Next come instinctive actions. These differ on the one hand from reflex actions, in that they are volitional and, therefore, conscious; while, on the other hand, they differ from intelligent actions, in that all the animals of the species under the same circumstances do the same things in the same way. They work volitionally according to a plan, but they do not perceive the fact that it is a plan. They adapt means to ends, but they do it blindly, not perceiving the relation between the means and the end. Each animal does this kind of work like every other one of its species, like its ancestors have done, and like its posterity will do after it. This class of actions embraces the greater part of the active, volitional work of the lower animals, such as the cell building of bees, the nest building of birds, the web building of spiders, and almost the entire train of animal industry. The animals seem in these cases to proceed volitionally, and, therefore, consciously, to adjust means to ends; but they do not, except in unusual cases, seem to see the relation between the means and the end. All this I shall call for clearness instinctive action. In this class of actions the animal does not benefit by its individual experience. It makes no improvements. It strikes out on no new

paths. It simply proceeds by an unintelligent impulse to do consciously what its fellows do under like conditions, but apparently not knowing why it does it. Instinctive action, as I shall use the term, is, therefore, conscious; volitional; impulsive; called forth by appropriate stimuli; the same, under the same circumstances, in all the individuals of the same species, similarly situated; not modified by the individual's own experience; and though adaptive in its character, its adaptation is not perceived by the individual.

3. Next come intelligent or rational actions. It can not be denied that in many instances individual animals, even of very low orders, do strike out on new paths. They do deviate from the line of action pursued by their ancestors and by the fellows of their own species. They profit by their own individual experience. They find unique and unusual means to reach ends that are attained by their fellows in the regular way, and they are forced to invent these means because of being shut out from the ordinary course by force of circumstances; and, to all appearances, they seem to perceive in an intelligent way the fitness of the new means to the old end.

These actions agree with those that are instinctive in that they are conscious and volitional; but they go beyond the instinctive kind in that the animal perceives the adaptation, as such, and takes advantage of his own experience to invent new means for a given end.

I could fill this address with remarkable instances showing that many individual animals of many different species do, in fact, profit by their own experience. That is, they sometimes act rationally as well as instinctively. Some species are much more intelligent than others, and the individuals of a given species vary greatly among each other in intelligence.

I shall content myself with giving two instances concerning dogs, one of which will illustrate instinctive action, the other intelligent action.

A young fox-hound, which had never associated with others of its kind, and which had never scented the trail of a fox, was one day for the first time taken out to the woods through which it was known that a fox had recently passed. The hound, without previous experience, passed unaffected over the trails of various animals, but immediately on striking the fox trail, was deeply affected, and, howling and barking as if frantic, rushed off in pursuit of its game. This was instinct.

Here is the other fact. A large dog in Algiers was sent every day to the baker's establishment for twelve rolls of bread, which for a time he faithfully brought home. One day he came with only eleven rolls in the basket. He was watched the next day, and was found to stop on his way home and leave one roll with a sick dog of his acquaintance. The baker was then instructed to put thirteen rolls in the basket, twelve of which were regularly delivered for several days. After a time, the dog came home

honestly with thirteen rolls. On investigation it was found that the sick dog had recovered. This series of acts involved an exercise of reason.

In the latter case the intelligence is, evidently, that of the animal himself, acquired by his own experience, and not common to other dogs. In the other case the intelligence is, apparently at least, not that of the fox-hound itself, for it was exercised antecedent to experience and under the same circumstances would have been exercised by any other fox-hound.

One act is rational, the other is instinctive.

I shall confine this discussion to the class of actions which I have called instinctive; as opposed, on the one hand, to those which are reflex, and on the other hand, to those which involve individual intelligence.

I do not mean to intimate that there is a distinct line of demarcation separating these three classes of actions from each other. On the ragged edge between reflex and instinctive action, there are many examples which can not definitely be said to belong distinctively to either class, since they appear to be both reflex and instinctive in their character. Similarly, no clear line of division can, in fact, be drawn between instinctive and rational actions, many being on the border line and overlapping both boundaries. These overlaps, however, do not affect our discussion of such actions as are clearly instinctive.

Whence the intelligence of the instinctive act?

The intelligence of reflex action is evidently foreign to the individual. The intelligence of the rational act of the Algerian dog is the dog's own intelligence. Whose is the intelligence of the fox-hound's instinctive act? No less intelligence is manifested in the fox-hound than in the Algerian dog: whose intelligence is it? Whose is the intelligence of the bee, the beaver, the caterpillar, the squirrel, the ant, the wasp, the spider, when they perform acts in which, apparently without any experience of their own, means are accurately adjusted to ends? There is thought somewhere in instinct:—whose thought is it?

There are substantially three answers to this question:

1. It is the intelligence of the individual itself.
2. It is the intelligence of the species.
3. It is intelligence in the animal, but not of it.

I.

Instinct is the intelligence of the animal itself, based on its own personal experience. According to this view, animals do not perform their complex instinctive actions without experience. On this theory, the bee soon learns to build its cell, but it is not born with this knowledge. A young chicken soon learns to measure the distance and direction of a fly, but it did not possess such knowledge before it broke its shell. This theory teaches that these instances

of animal intelligence, and all others like them, are only examples of rapid learning when the animal is thrown in contact with the outer world. It is born with nothing but a remarkable aptness to learn.

It is evident that this is not the common view. The opinion prevails that animals begin to perform intelligent acts before they have had time or opportunity to learn. Is not the general opinion in this case the correct one? Does it not require a very vigorous exercise of faith to believe that a bee without a teacher can learn to do in an hour what most men with skillful teachers could not learn in a lifetime? That an untaught spider can perform a feat in an hour's experience, over which the ingenious engineer must spend years of patient study? That a turkey can, in a few hours, determine to a hair's breadth the distance of the fly it catches, while the infant Sir Isaac Newton must grasp at the moon for weeks before he finds that it is beyond his reach?

To the ordinary observer, the lower animals seem to enter upon their life-work as soon as they are brought in contact with the world, and they seem to do their work as well the first time they make their efforts, as in the later periods of their lives. If their skill comes by experience, they are much apter pupils than men; and if they learn their trades, they do it so rapidly that the ordinary observer can not distinguish the process. But if these are the facts, we must accept them, however remarkable they may seem. After all, why should it be more wonderful that a

bee should build its mathematical cell after an hour's experience, than that it should do so with no experience at all? Let us, therefore, seek honestly for the facts, to whichever of these views they may lead us; for, in reality, one would be no more remarkable than the other. The fact remains that the bee had been building its cell in strict accordance with the laws of mathematics for centuries before the profoundest mathematicians of the world had discovered those laws. Such is the fact, and the mere question of an hour's experience in cell-building can not modify the wonderful character of its architectural achievements.

While the casual and unscientific observation of the early life of animals seems to teach that they are born to their work and do not need to learn, what do the careful researches of a strict scientific method indicate?

I shall give you the results of a long series of experiments performed, after the most rigid methods of science, by Douglas A. Spaulding, and reported in MacMillan's Magazine.

The experiments were performed on more than fifty chickens with great uniformity in the results. While the shell was yet unbroken, it was taken from under the mother hen. The experimenter broke the shell, and instantly blindfolded the newly hatched chick before it had time to open its eyes. It was kept in blindness from one to three days. Then the hood was taken off its head, and the chick was placed on a table with a few insects about it. At first, it

seemed stunned with the excessive light and did not have as good use of its members as before; but in a few moments it became accustomed to its new surroundings. In two minutes its eyes followed the movements of the crawling insects. It turned its head with as much steadiness and accuracy as a hen of large experience. In from two to fifteen minutes it pecked at the insects, never striking at any that were beyond its reach. It never missed its object by more than a hair's breadth, although the insect was frequently smaller than a needle's point. The young chick would frequently swallow an insect at the first effort, though sometimes several attempts were necessary.

Let me give his exact language in the case of a chicken which had been blindfolded for three days and was then unhooded.

"For six minutes it sat chirping and looking about it; at the end of that time, it followed with its head and eyes the movements of a fly twelve inches distant; at ten minutes it made a peck at its own toes, and the next instant it made a vigorous dart at the fly, which had come within reach of its neck, and seized and swallowed it at the first stroke. For seven minutes more it sat, calling and looking around it; when a hive bee, coming sufficiently near, was seized at a dart and thrown some distance, much disabled. For twenty minutes it sat on the spot where its eyes had been unveiled without attempting to walk a step. It was then placed on rough ground

within sight and call of a hen, with a brood of its own age. After standing, chirping for about a minute, it started off towards the hen, displaying as keen a perception of the qualities of the outer world as it was ever likely to possess in after life. It never required to knock its head against a stone to discover there was 'no road that way.' It leaped over the smaller obstacles that lay in its path and ran round the larger, reaching the mother hen in as nearly a straight line as the nature of the ground would permit. This was the first time it had ever walked by sight."

Now, if there is any fact in psychology well attested, it is, that the human infant has no perceptions of distance or direction prior to experience. It requires generally an experience of several days and frequently of several weeks before a babe has any well-defined idea of the properties of the outer world. It can not, for some time, fix its eyes definitely on any object. It does not follow with its eyes the motion of one's hand. Pass your hand back and forth before its face, and it makes no perceptible manifestations. It acquires first, doubtless, the idea of direction; but when it has acquired this idea, it has no adequate perception of distance. It sees that the lamp is on the right, the left, or in front; but it will as likely reach after it at the distance of a yard or a rod, as at an arm's length. It is only by a long and tedious experience that the infant learns

what the chicken does perfectly in the first five minutes of its life.

The experiments just given seem to indicate that the chicken has perceptions of distance and direction independent of experience, and born with it in a full state of development. Though it would be scarcely less wonderful that its accurate knowledge of space came by a few moments' experience than that it was fully inborn, yet the facts justify the position that its ideas of space which are perceived by the eye are not developed, but are native to it.

Look, now, at the knowledge furnished by the ear.

It is well known that an infant has no idea of the direction of sound until after a long experience. A sudden noise may shock it, but it has no conception of its direction. This is learned only by a tedious experience. Has a chicken the power to determine the direction of a sound prior to experience? Let me quote again from Mr. Spaulding.

"Chickens hatched and kept blindfolded for a day or two, when unhooded and placed within nine or ten feet from a box in which a hen with chicks was concealed, after standing for a minute or two, uniformly set off straight for the box in answer to the call of the hen, which they had never seen and never before heard. This they did, struggling through the grass and over rough ground, when not able yet to stand steadily on their legs. Nine chickens were thus experimented upon, and each individual gave

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the same positive results, running to the box scores of times, and from every possible direction. To vary the experiment, I tried the effect of the mother's voice on hooded chickens. These, when left to themselves, seldom made a forward step; their movements were round and round, and backward; but when placed within five or six feet of the mother, they, in answer to her call, became much more lively, began to make little forward journeys, and soon followed her by sound alone, though, of course, blindly, keeping their heads close to the ground and knocking against everything that lay in their path.

"Another experiment consisted in rendering chickens deaf for a time by sealing their ears with several folds of gum paper before they had escaped from the shell. These had their ears opened when between two and three days old, and on being placed within call of the mother, hidden in a box, they, after turning round a few times, ran straight to the spot whence came what must have been nearly, if not actually, the first sound they had ever heard."

These facts plainly teach that chickens have, born with them, ideas of distance and direction, and that they do not need to learn them, as do human beings, by experience through the organs of sight and hearing.

Careful experiments have revealed other facts relating to the instinct of chickens. They have an inborn dread of their enemies. A chicken does not need to be attacked by a hawk in order to shun it,

but on first sight of this rapacious bird it is thrown into a violent tremor. Prior to all experience, chickens make their toilet, they begin to scratch the ground for food, and when they get a delicious morsel too large to be disposed of at a swallow, they run off with it, though they have not yet in their short life been the victims of highway robbery.

What has been found to be true of chickens has also been verified with many other animals; and perhaps if the experiments could be carried through the entire range of the animal world, the same truth would be demonstrated, viz., that there is a large amount of animal intelligence that is inborn, fully developed, and is not the product of experience.

The instances mentioned were such that the animal had no opportunity, if even it had the power, to learn by imitation or instruction of its fellows; and, doubtless, the isolated spider would build its mathematical web, the isolated bee its mathematical cell, the isolated ant its mathematical arch, and the isolated beaver its mathematical dam, though they might never have seen one of their fellows, and though they might never have seen even a pattern of their architecture.

The first of the three answers to the question, "Whose is the intelligence of instinct?" is: It is the intelligence of the animal itself, developed by its own experience. The facts of instinct, as we have now seen, do not justify this answer.

II.

The second answer to the question is this:

Instinct in animals is the intelligence, not of the individual itself, but of the species to which it belongs. The intelligence is the product, not of the individual's experience, but of the experience of its ancestors, accumulated by natural selection and handed down by heredity.

According to this view, whence, for instance, comes the instinctive dread of hawks on the part of chickens? It would be explained about as follows:

Many generations ago some chickens, without fear of hawks before their eyes, ventured out into the open field. The enemy from its lofty height swooped down upon its prey and captured one of the number. The remaining chickens were terrified, and by their individual experience acquired a dread of hawks. The next generation of these chickens inherited the same fear; and thus the process continued, their hate intensifying by the process of natural selection as the generations rolled around, until now the entire posterity of those original chickens are born with a dread which was at first acquired by the experience of a few individuals and was perpetuated by hereditary law.

Given the process of natural selection and the law of heredity (which, however, may be as difficult to account for as instinct itself), and given, further, the happy juncture of coincidences that might be

necessary, and a passive instinct, such as fear, could perhaps be accounted for by the doctrine of accumulated ancestral experiences.

Now, a passive instinct, like the dread of an enemy, is the most favorable instance for this law of inherited acquisition.

But how shall we explain such active instincts as cell making, web building, arch forming, provision for the future, and others equally remarkable? Heredity may, in some mysterious manner, have photographed the image of a hawk on the nervous system of a chicken, and so linked the emotion of fear with this image that the sight of a real enemy will call up the fear by the laws of association; but if no hawk appears to start the train of association, there will be no dread. The dread arises only upon some external stimulus and is purely passive. This class of instincts originates nothing. Given the outward exciting cause, and the instinct shows itself. But what shall we do with those instincts that are independent centers of force, and which need not to be called into exercise by any external agency?

For instance, a beaver will build its dam on a dry floor. Now, it may easily be that by means of a hypothetical hereditary photograph on its brain, of a body of water and a model dam, the laws of association would, on its first sight of water, call up the image of the dam; and the inherited habits of its ancestors would mysteriously begin to manifest themselves; but in the absence of water, what is to start

the train of association? The beaver goes to work on the dry floor. There seems to be some impelling force in the animal urging it to the trade of its forefathers, independent of outer exciting circumstances. The laws of association are of no avail here, for there is no occasion for their action. Drop out from the theory of mere inherited acquisition of instinct all support of the laws of association, and how will it be able to stand?

These queries concerning the mere hereditary origin of instinct apply with fully as great force to the cell building of bees, the web building of spiders, the arch building of ants, and all the higher orders of instinct.

I can not, however, forbear making particular mention of one remarkable class of facts which seem repugnant to the theory of mere hereditary habit.

In the species of insects known as Necrophores, the parents never see their offspring, and the offspring never see their parents. The mother insect, after her eggs have been deposited, brings the dead body of an animal beside them. The young insect on waking to life finds food at hand, without which forethought on the part of its parents, it must have perished. Who taught the parent this? Its own mother? But it never saw its mother. The insects of each succeeding generation do the same thing, though they have never seen a representative of the generation preceding. Do you call this hereditary habit? How did the young of those insects subsist

before the habit was formed? The habit must have been fully formed from the first generation, and this contradicts the very meaning of the word habit. That alone is habitual which comes from repetition, and in no case can the first act be the result of habit.

Here is, if possible, a still more remarkable case. In the species of insects called Pompilia, the mothers are herbivorous, while the young in their larval state are carnivorous. Who teaches the mother, that lives on herbs alone, to bring the dead body of an animal to the spot where her egg has been deposited, that her offspring may have at hand the only food on which it can subsist? Is it habit? But while the habit was forming, the very tendency of the species to come into existence would have been abortive. The first insect of this species must have done precisely what the present one does, in order to perpetuate the race.

Here is an isolated instance of intelligence in a spider which neither heredity nor its own personal experience would seem able to explain.

A spider captured its victim and brought it by great effort to a point on the floor vertically under its web, which was built on the ceiling. The problem which it proposed to itself was, how to get the object from the floor to the web, a vertical distance, say, of ten feet. Leaving its object on the floor, it ran up to its web, fastened a thread of its own spinning in the meshes, and by means of this thread dropped

vertically down upon the object on the floor; the thread reaching, of course, from floor to ceiling. Seizing its prey, it endeavored to climb up the suspended thread. But the victim was too heavy, and, after several desperate struggles, the spider seemed forced to give up the undertaking. In fact, however, it only changed its tactics.

Perceiving the impossibility of raising the object by a dead lift, the spider fastened the lower end of the thread to the object, and ran up the thread alone to the ceiling. After surveying the situation for a moment, it ran out on the ceiling some distance from the web, and fastening a second thread to a convenient place in the ceiling, let itself down again to the floor by means of the second thread, which it fastened to the floor, this time a short distance from the object. Seizing the object, the spider ran across the intervening space, pulling the object to one side as a pendulum, and fastened it to the second thread, now a short distance above the floor. Continuing this swing of the pendulum right and left, it slightly raised the object at each vibration, substituting this indirect method for the method of a dead lift.

I do not know whether the spider finally succeeded by this zigzag movement in getting its booty into the web, but whether it did or not, the fact remains that it made intelligent use of a fundamental principle of mechanics, and adapted means to ends as accurately as a mathematician could have done. Where did it learn this unique feat of engineering?

Even granting that, in common with other spiders, it learned how to build a web from its ancestors, through heredity, whence did it learn to differentiate itself from other spiders and to perform an act so unique as that described? It could not have learned it from its fellows; and, even if so, how did they come by the knowledge? This particular phase of intelligence could hardly have been hereditary, since the occasion for such a feat would have been too rare to establish a habit in its ancestors.

The doctrine of hereditary habit, or in other words, inherited acquisition, does not seem competent to explain all the facts of instinct. That instinct is greatly modified by habit and heredity is certainly true. That some instincts have originated altogether through these means, seems very probable. But that instincts of the classes indicated have their origin in this way is more than can readily be admitted.

Do you say that if heredity can account fully for one instinct, why may it not possibly account for all? If one instinct may altogether be the direct outcome of law, and be destitute of intelligence, why, then, may not all instinct be equally unintelligent?

What is true of one thing is not necessarily true of everything like it. The quick movement of my hand to ward off a sudden danger is reflex action, and has in it no intelligence of mine. Do I infer, therefore, that the deliberate motion of my hand has none of my intelligence in it? I know to the con-

trary. A lead pencil is admirably adapted as an edge for drawing straight lines, but it is not made for that purpose. Shall I say, then, that since its adaptation as a straight-edge is accidental, so its adaptation to marking on paper is also an accident? I know to the contrary.

Suppose I admit that some instincts can be accounted for by hereditary habit, must I then admit that all are thus originated?

Are we not in danger of claiming too much for heredity in the origin of instinct? After all, what is hereditary—a fully developed effect, or only a tendency? Do we, except in special cases, inherit tuberculosis, or a tendency towards it? Is insanity hereditary, or merely a tendency towards insanity? The child of a consumptive parent has a tendency to consumption, but it will not necessarily die of this disease. The tendency may be counteracted by a proper course of life, and in a few generations may be eliminated altogether. Peculiarity in the parent appears as a tendency towards the same peculiarity in the children, but if no exciting cause appear, it may not manifest itself until the third generation, and it may be entirely eradicated. It is not the rule if, indeed, it is ever the fact, except under peculiar conditions, that children are born with consumption, insanity, or any hereditary disease fully developed.

How much more striking is this principle as it applies to the intellectual traits! No one is born

a poet, the proverb to the contrary notwithstanding. No one is born a mathematician or an inventor. Human beings are born with peculiar aptitudes for invention and poetry, but never with the full-grown powers. Is it at all conceivable that the human race could be so perfected that children would finally enter the world with fully developed mental and physical powers; that the new-born babe, with no experience, would go to bridge building, like the new-born spider; to house building, like the new-born ant; to the execution of the profoundest principles of mathematics, like the new-born bee? Is it not claiming too much for heredity to say that, because the parent spiders in their maturer life can build a most ingenious web, the offspring without experience can do the same? Heredity may stamp on the young spider a genius for web-building:—can it do more? Is it scientific to claim more for it? The central pillar in the temple of science is development. Where is the development when an inexperienced spider suddenly leaps to the heights of engineering skill? You can not in an instant develop a man with an intellect into completeness: how, then, can you in the flashing of an eye develop an insect, with not a thought in its brain, into the symmetry of perfection?

But suppose that we grant that the laws I have mentioned—viz., heredity and natural selection—are all the terms of the problem, and that they can, unaided, account for all the phenomena of instinct;

still, what is to account for these laws themselves, in which inhere all the intelligence manifested in the realm of instinct? The intelligence of instinct remains; and we have merely shifted it from instinct itself, back to the laws that have evolved it. We have not annihilated the intelligence manifested in the bee, by taking it away from the bee. If we take it from the bee, we must put it somewhere; for it exists. Is it enough to say that the intelligence vanishes since instinct is remanded to the realm of blind law? Herbert Spencer defines instinct to be compound reflex action. Let it be so; does this definition annihilate the fact of instinct? Do not the phenomena remain the same, whether you call them instinctive or reflexive? And does not the intelligence in the actions of the bee remain, even though you call instinct the product of law alone? It is as easy to account for instinct as to account for law.

All law is the outcome of intelligence.

Law necessitates design. If law is a mere succession of events, there need be no intelligence in it. But law is more than this.

Law has from its very nature a tendency.

There can be no tendency without an end towards which the tendency looks.

There can be no end without a previous exercise of intelligence.

Consequently, law is the product of intelligence.

If, therefore, instinct be the product of heredity and natural selection alone, it must necessarily be the

product of the intelligence back of these laws, and on which these laws rest.

III.

This brings me to the beginning and to the end of the third solution of instinct.

It is intelligence *in* the animal, but not *of* it. Back of instinct is law. Back of law is the Lawgiver. And who is the Lawgiver but God? The intelligence of instinct is the intelligence of God. The laws of nature are the thoughts of God; and if instinct be only the outcome of law, it is the direct product of God's thought.

How near we are brought to the great Author of our being when we contemplate the wonderful actions of even the lowest orders of the animal world!

If the instinct of the bee or the butterfly points to God, what shall we say of human instinct,—that intelligence in man that is not his own? What shall we say of those impulses that lead us outward and upward to the Author of our being?

If the bee, guided by an impulse not its own, finds its way to its unseen hive, may not we, following the innermost instincts of our being, find our way to the unseen God? There is an instinct within us that responds to the call of God. There is an invisible chord within us that vibrates at the touch of God. There is a mysterious depth within us unfathomed but by the infinity of God. There is a life within us unwaked but by the voice of God.

"The ivy in a dungeon grew,
Unfed by rain, uncheered by dew;
The pallid leaflets only drank
Cave moistures foul and odors dank.

But through the dungeon's grating high,
There fell a sunbeam from the sky;
It slept upon the grateful floor
In silent gladness evermore.

The ivy felt a tremor shoot
Through all its branches to the root;
If felt the light; it saw the ray;
It strove to blossom into day.

It grew; it crept; it pushed; it clomb;
Long had the darkness been its home;
But well it knew, though veiled in night,
The goodness and the joy of light.

It reached the beam; it thrilled, it curled;
It blessed the warmth that cheers the world;
It rose towards the dungeon bars;
It looked upon the light and stars;

It felt the life of bursting spring;
It heard the happy skylark sing;
It caught the breath of morns and eves;
And wooed the swallow to its leaves.

By rains and dews and sunshine fed,
Over the outer wall it spread;
And in the daybeam waving free,
It grew into a steadfast tree.

Wouldst know the moral of the rhyme?
Behold the heavenly light, and climb.
To every dungeon comes a ray
Of God's interminable day."*

*Charles Mackay.

SIGNS OF GOD IN THE ORDER OF THE UNIVERSE

Is There a Superhuman Thinker?

JANET, in his profound treatise on "Final Causes," relates this incident: A Scottish philosopher, the wise Beattie, formed the ingenious idea of putting in operation the proof of final causes, to inspire his young child with faith in Providence. This child was five or six years old, and was beginning to read; but his father had not yet sought to speak to him of God, thinking that he was not of an age to understand such lessons. To find entrance into his mind for this great idea in a manner suitable to his age, he thought of the following expedient. In a corner of a little garden, without telling any one of the circumstance, he drew with his finger on the earth the three initial letters of his child's name, and sowing garden cresses in the furrows, covered the seed and smoothed the earth. "Ten days after," he tells us, "the child came running to me all amazed, and told me that his name had grown in the garden. I smiled at these words, and appeared not to attach much importance to what he had said. But he insisted on taking me to see what had happened. 'Yes,' said I, on coming to

the place, 'I see well enough that it is so; but there is nothing wonderful in this,—it is a mere accident,' and went away. But he followed me, and, walking beside me, said, very seriously: 'That can not be an accident. Some one must have prepared the seeds, to produce this result.' 'You think, then,' said I to him, 'that what here appears as regular as the letters of your name, can not be the product of chance?' 'Yes,' said he, firmly, 'I think so.' 'Well, then, look at yourself; consider your hands and fingers, your legs and feet, and all your members, and do not they seem to you regular in their appearance, and useful in their service? Doubtless they do. Can they, then, be the result of chance?' 'No,' replied he, 'that can not be; some one must have made me them.' 'And who is that some one?' I asked him. He replied that he did not know. I then made known to him the name of the Great Being who made all the world, and regarding His nature, I gave all the instruction that could be adapted to his age. The lesson struck him profoundly, and he has never forgotten either it or the circumstance that was the occasion of it."

The simple question of that innocent child is the irrepressible question of all men: "Who put his mark on the universe?" If the mark is there, the Marker must have been there.

Is there a mark on the universe? If so, there was a Marker. Is there a thought in the universe? If so, there was a Thinker. Is there a superhuman

thought in the universe? If so, there is a Superhuman Thinker. Is there an infinite thought in the universe? Then, there is an Infinite Thinker.

Every phenomenon is a standing interrogation point, forever putting the question of its own existence. Whether we could have been constituted differently or not, the fact is that we are so constituted as to believe—indeed, as to be incapable of disbelieving—that every phenomenon must have a cause adequate to its existence. If there is thought in the world, it is not for us to say that perhaps there is a thinker in the world. It is impossible for us to say otherwise than that the thinker is as much a certainty as the thought. If there is an infinite thought in the world, there is none the less an Infinite Thinker.

A plan is an organization of thought, or a thought-organism, the elements of which work together towards a foreseen end. A planner is, therefore, pre-eminently a thinker; a thinker, who not only originates isolated thoughts, but who puts them in relation to each other, and sees from the beginning the end toward which they lead. If there is a superhuman plan in the world, there is a superhuman Planner, able to see the end from the beginning, and to grasp in all their relations the elements of the plan.

Is the world, then, a plan at all? For if so, it goes without saying that the plan is superhuman and infinite.

What constitutes a plan? I have said that it is organized thought, all the parts of which fit with their corresponding parts and co-work towards a definite end. In every plan there is adaptation of means to an end; but where adaptation is found, is it necessarily a part of a plan? An end demands pre-existing adaptation, but does adaptation imply an end? For instance: A watch is adapted to amuse a child, to serve as a paper weight, as a shield for the protection of the body against a bullet, as a pawn on which to secure a loan from a broker; but were any of these uses a part of the plan of the watchmaker? Adaptation, then, does not neccesitate design. To constitute a plan, the adaptation of means to end must be predetermined.

Now, it is possible—indeed, certain—that many of the adaptations of nature were not predetermined. A mountain crag is well adapted to the purpose of an eagle's nest. Was the mountain reared for the eagle, or did the eagle take advantage of the existing but not predetermined fitness? Would there not have been mountains if there had been no eagles, and might there not be eagles if there were no mountains? A hollow tree is well adapted as a hiding place for squirrels, but were the hollow trees and the squirrels made for each other, or either for the other? At any rate, whether or not the mountain was made for the eagle and the tree for the squirrel, there is nothing inconsistent in supposing that these were not parts of the same plan. It is neither illogical

nor irreverent to suppose that the eagle takes advantage of the existing mountain, and the squirrel of the existing tree, when they find these objects adapted to their uses.

Now, if a part of the fitness of nature is accidental, why not all? This is the central objection to the proposition that nature is a plan. Is the objection a valid one?

Let me clearly and fully elaborate the objection, in order that we may intelligently pass upon its validity.

The rapids above Niagara Falls are well adapted to the purpose of water power. Were they created for the factory, or did the manufacturer set up his machinery because of the existing, but not predetermined, fitness? Mount Hamilton, in California, is a fit place for an astronomical observatory. Did nature lift it up for that purpose, or did the founder of Lick Observatory select it because of its fitness? A high elevation is a fit place for a windmill. Was the elevation cast up by nature for the windmill, or did the manufacturer, seeing the fitness, merely take advantage of it? Manhattan Island is an appropriate place for a commercial center. Was the island created for the site of a great city, or have sagacious men merely taken advantage of the existing fitness?

Mark, I do not say that Niagara was not made for the water wheel, or the hill for the windmill, or Manhattan Island for New York, but I simply say

that it is neither illogical nor irreverent to suppose the contrary.

But here are instances concerning which there can be no doubt: The ocean is well adapted to the purposes of the pirate. Was the ocean made for the pirate, or does he take advantage of a fitness that was not intended? The darkness is well adapted to the purposes of the burglar. Was the night made for the burglar, or does he take advantage of the unintended fitness?

Now, the man who denies, or at least doubts, that nature is a plan, reasons thus: Since a part of nature's fitness is accidental, why not all? The ear was not made for the ear muff; how do we know that it was made for the air? If its fitness to support an ear muff was not intended, how do we know that its fitness to convey vibrations was intended?

In a word, the objection is this: The ear was not made for the purpose of hearing, but we hear with it because it is adapted to the purpose. The stomach was not made for digesting, but it digests because of its fitness to do so. The brain was not made for thinking, but we think with it because it is fitted to the work. In general, since a part of nature's adaptation is undoubtedly not premeditated, it is possible that none of it is premeditated. This is, in my judgment, the most formidable objection ever brought against the proposition that nature is a plan.

I have just one answer to this objection, viz.,

that it holds with equal force against the proposition that any work of man is a plan. Since a part of human adaptation is confessedly accidental, do we, therefore, infer that men never act according to a plan?

I have observed that on certain notable political occasions, the locomotives that bear our trains are frequently decorated with flags and banners. Are the parts of the locomotives to which these decorations are attached made for the purpose of displaying banners, or does the engineer take advantage of these parts because they are suitable for the purpose?

Here, then, is one of a countless number of like instances in which human ingenuity takes advantage of existing fitness. Are we, therefore, to infer from the fact that the locomotive was not made for a flagstaff, that also it was not made to pull a train; but that the engineer, having discovered that it is fitted for this work, simply takes advantage of the existing fitness, and attaches the locomotive to the train?

Now, I believe that the locomotive was made for the train. I have, then, an equal right, the conditions being similar, to believe that the ear was made for the air. I believe that the microscope was made for the eye. I have the same right, other things equal, to believe that the eye was made for the light. In general, I believe that men act according to a plan. I have as good right, then, to believe that nature acts according to a plan, provided the

principle by which I assign forethought to the works of men will apply equally to the works of nature.

What, then, is the principle by which we judge whether fitness is accidental or predetermined? Let us see.*

If two lines converge, there must be some point at which they will meet when produced. Therefore, if they are drawn at random, they may as well converge towards one point as another. If I am asked to account for their convergence towards a particular point, it may be sufficient to say that it was purely accidental. It is a coincidence that can be accounted for by the unpremeditated or undirected contraction of the muscles. If a third line be drawn towards the common point of convergence, I should say that it was not likely to be accidental, yet that it might be so. If a fourth line be drawn towards the same point, I should say that it was still less likely to be accidental, but that it was possible to be so.

Now, as the number of converging lines increases, the probability of accident diminishes, until the number may become so great as to remove all probability of accident, and to demand a specific cause for the coincidence of convergence. In other words, the coincidence itself becomes a phenomenon which must be accounted for. The muscles are the cause of the lines, but not of the coincidence.

One day a house fell in the city of San Francisco. That was nothing remarkable. Houses fall every-

*Final Causes, Janet, pp. 17-55.

where by the law of gravitation when they reach a certain stage of decay. While in this particular case there may have been some special reason for the fall, still we do not wonder; for gravitation and decay are sufficient to account for the fact. But at the same instant another house fell in the same city. This begins to attract our attention. That two houses in a large city should fall the same day would not be remarkable, but that they should fall at the same instant would lead us to suspect that something besides gravitation and decay was a factor in the case. Nevertheless, we should be compelled to admit that the double fall might occur without any additional agency. But at the same instant a third house fell; and a fourth; and a hundredth; and a thousandth. Now we have reached a point at which we say that gravitation and decay are not sufficient to account for the phenomenon. They perfectly account for the fall, but not for the coincidence of falling at the same time. That is to say, the coincidence of the simultaneous fall becomes itself a phenomenon which must be accounted for. We demand that there should be some common cause for such an agreement of effects; and when we are told that the city was shaken at that instant by an earthquake, we say that the coincidence is fully explained.

A ship sailing from New York to Liverpool meets on the broad Atlantic another ship bound from Boston to the Mediterranean Sea. Although this meeting might be unexpected, yet we can readily

see that it could occur. Such meetings do occur every day. The steam, the wheels, the pilots, the engineers, and so on, are the efficient causes, and nothing else may be necessary to account for the coincidence.

If, now, on the same day and at the same place, two other ships returning from Liverpool and the Mediterranean, should fall in with them, the coincidence would be much stranger. Yet we should say that it might be an accidental meeting, and require nothing but efficient causes to account for it—that is, the paths marked out for the respective vessels met on that day at that place.

But as the number of vessels increases, the probability that the meeting is an accident diminishes; and it is not enough to say that a thousand vessels meet on the high seas, merely because their respective routes have fortuitously crossed each other.

Mark, I do not say that it would be an impossibility, but that the probability would be reduced to such a minimum as to render it practically impossible. If you were told that all the ships in the world met at a common place on the ocean, you would feel justified in the positive conviction that steam and wheels alone, although the efficient causes of the meeting, were not sufficient to account for the coincidence. You might not know the true cause. You might infer it to have been a naval battle, or an international congress; but however far you might miss the real cause, you could not persuade yourself

that there was no other cause besides the steam and wheels.

I must insist on pressing still further the principle by which we determine whether fitness is an accident or a forethought.

In 1872, a man made a solid raft, a hundred by a hundred and fifty feet, with water-tight sides and a smooth upper surface, and, floating it out into East River between Brooklyn and New York, anchored it firmly near the Brooklyn shore. A year later, another man, seeing what had been done, constructed a similar raft, and anchored it near the New York shore. A stonemason, having discovered these rafts, concluded that they were suitable places on which to build huge masses of masonry. Taking advantage of this adaptation, he procured immense blocks of stone, and laid course after course on the prepared surface of one of the rafts.

As the weight of the superincumbent masses of masonry increased, the floating raft gradually sunk until its base rested on the sandy bed of the river. Fortunately, the mason had left several large vertical openings in the masonry, and a mechanic, going down one of these openings, to the top of the sunken raft, found that it was hollow underneath. He procured air pumps, and forcing out the water from the under portion of the raft, he went below, and explored the river-bed within the limits of the bottom of the raft. As the extreme weight was causing the submerged structure to sink into the sand, he set

men to work to excavate the sand from within, and carry it up through the openings which had fortunately been left in the masonry. As the sand was taken out from below, the raft continued to sink with its superincumbent weight, until finally it reached the solid rock.

The mechanic then filled the hollow interior of the submerged raft and the vertical openings with masonry, and built up the outer mass to a height of two hundred feet. By a coincidence, another mechanic treated the other raft in a similar way, and brought the upper surface of the masonry to the same height above the water.

Another mechanic, finding such convenient piers already made, stretched great cables of wire across the river, over the tops of the piers, and firmly anchored them at convenient places on the shores.

Another mechanic, seeing these large cables, fastened to them hundreds of short wire cords, and let them hang vertically from their support on the main cables.

Another mechanic, finding these suspended cords, built a platform with a roadway reaching entirely across the river at a great height above the water.

A railroad engineer, discovering this thoroughfare, took advantage of it by laying a double steel track across the highway.

Once, when I was in New York, I walked down to this wonderful structure, and seeing such a convenient highway over the river, I took advantage of

its adaptation and walked across it. I found, also, thousands of others taking advantage of the same fact, and using the highway, as if it had really been intended as a thoroughfare; and I saw trains of cars running across the steel tracks precisely as though these tracks had been made for the cars.

Now, I do not deny that I walked across this highway because I found it adapted to the purpose of a thoroughfare, but will any one in his senses say that it was not adapted to the purpose of a thoroughfare in order that the public might use it? Is it within the range of possibility that what I have just described could occur, without a previously formed plan and an intelligent planner?

In this case the number of independent lines converging towards a common point is so great that the coincidence of their convergence can not be accounted for on any other supposition than that the Brooklyn Bridge existed in thought before it existed in fact, and that there was a thinker before there was a bridge.

Let us now turn our attention to another set of builders. They are blind and deaf. They are without hands or feet. They can neither speak nor understand. I mean the builders of that wonderful structure called the human body. I spoke of them in the first lecture of this series. We term them cells. They are little points of living matter in every part of the body. They are ignorant, each of what the others are doing; indeed, each of what it-

self is doing; and yet they work out the most wonderful machinery in the range of human knowledge.

Look at their work. One group builds a muscle and endows it with the power of contracting; another group builds a hard bone with a joint; another group fastens the muscle to the bone in such a way that if the muscle should contract, the bone would bend on its hinge; another group works out a set of teeth and fastens them in a firm bed that has been placed on hinges by another group of independent workers; and, what is remarkable, the distances are so adjusted that if it should be desirable to carry any object to the teeth, the contraction of the muscle already prepared and attached to the bone would bring it most conveniently to the desired place; and if it should be desirable to grind the object into fine particles, the teeth would, by a strange coincidence, perform that work.

Another group of workers builds a tube with a cavity at its lower extremity, which we call the stomach. The tube is so constructed with contracting rings that, if desirable, they could by their contractions readily force the masticated substance through into the stomach. Another group builds a million little sacs and deposits them in the lining of the stomach; another group fills these sacs with a wonderful liquid that could, if the opportunity should occur, dissolve the masticated substance that might be forced into the stomach. Another group builds around the cavity a series of muscles which could

roll the masticated substance over and over, and bring it in contact with this wonderful liquid. And, then, another set builds a million little mouths and puts them in a place so convenient that they could drink up this substance in case it should be dissolved. Another set builds a network of canals that might convey this liquid to any convenient place. Then, another set builds in these canals numerous locks which could, if desirable, prevent the re-flow of the liquid. Another group builds a reservoir which might receive this liquid. Another group builds a strong pump which might force the liquid from the reservoir into any opening that should be presented. Another group builds a second system of canals which, strangely enough, lead to a place that seems as if it might have been prepared for the very purpose of purifying the liquid, if it should, perchance, come that way. Then another set builds a canal system which would return the liquid to the pump, if it should, perchance, go through the purifier. When it gets back to the pump—if by any coincidence this should occur—it would find outlets by which it might be sent back to the very starting point, and carry new and vigorous workers to take the places of any that might have died in the meantime.

Now, while all this is going on without the knowledge of the busy mechanics, other workers are engaged in different directions.

One set builds a machine that could, if desirable,

think and will; and by a remarkable coincidence, another set puts this machine in communication with the muscles by means of millions of white cords; so that, if the thinking machine should send out an order along these cords, the muscles would contract and turn the flesh-covered bones in any desirable direction.

At the same time, another set builds a window out of which the thinking machine could look and see in what direction it might be expedient to move the muscles.

And a million other independent workers build a million other contrivances that could be used to advantage, if there should be occasion: and if all these innumerable complex circumstances should exist at the same time, and continue to exist through a series of years, they would render possible the existence of a living, moving, intelligent human being with all the possibilities of life.

Mark, not only are all these different groups of workers independent of each other, but each worker is ignorant both of what the others are doing, and of its own operations; and, what is most remarkable of all, new workers and new groups are every moment coming up to take the places of the dead, and, beginning their work where their predecessors left it, carry it on to a symmetrical completion.

Now, which is the more natural solution of the problem of this human machinery?

Shall a man say: Since my brain is so well

adapted to the purpose of thinking, therefore I will take advantage of the fitness and think; or shall he say, this fitness exists in order that I may think?

Shall he say: Since my eyes are adapted to seeing, I will make the best of the coincidence and look through them, or my eyes were made for the purpose of seeing?

Shall he say: Since the innumerable complex adaptations exist in my body, therefore I will avail myself of their fortuitous fitness; or this fitness exists that I may enjoy the benefit?

Now, I will not deny that we look through our eyes because of their fitness for seeing; so we look through a telescope because it is adapted to the purpose in view. But this does not change the fact that both the telescope and the eye were made to be looked through.

Neither will I deny that physical, chemical, and vital forces are the efficient causes of the body; but they can not account for the coincidence that every part should be made for every other part. The independent lines of causes converging towards a common point in the human organism—viz., the production of a complete man—are so numerous that their convergence can not be accounted for on any other supposition than that the human organism existed in thought before it existed in fact.

But if there was thought before there was a human body, there was a Thinker.

If the adaptations in the human body were determined, there was first a Determiner.

If the human body is a plan, there was first a Planner.

The principle by which we judge the fitness of man's action to be predetermined, applies with overwhelming force to the fitness displayed in the mechanism of the human body.

The human body is, therefore, a plan, and is the product of a Planner of infinite wisdom and power.

The human body is a superhuman thought, and back of it is a Superhuman Thinker.

The human body is a fragment of an infinite thought, and back of it is an Infinite Thinker.

* * * * *

We have glimpsed but one corner of the universe, and we have found the Thinker there.

So we shall find Him everywhere; in the rainbow's arch and the cataract's roar; in the snowflake's crystal and the dewdrop's sheen; in the restless sea and the azure sky; in the rose's blush and the lily's fragrance; in the butterfly's wing and the fish's fin; in the nightingale's throat and the eagle's eye; in the spider's web and the honey-bee's cell; in the lion's courage and the turtle-dove's peace; in childhood's faith and motherhood's love; and O, vision of visions! we shall see Him in the unspeakable glory of the human soul, which alone is akin to the Infinite Planner, and which is, itself, so far as we can see in nature, the greatest thought of the Infinite Thinker.

If the bare conception of the human soul is sublime beyond expression, what must be the glory of the Infinite Conceiver!

If the mere plan of the human soul is inconceivable, involving as it does in its possibilities time and eternity, finite and infinite spaces, visible and invisible worlds, beginning but no ending, let us pause with reverence and adoration before the uncreated glory of Him who planned it, and who has pledged His infinite resources to the ultimate realization of the plan.

The innocent child of that Scotch philosopher saw the initial letters of its name traced in the garden bed, but significantly it saw beyond the letters to the hand of love that planted the seed.

We look out upon the universe and see its order; but back of all this order we read, "There is an Ordainer." The three letters traced everywhere in the earth and air and sky spell *GOD*.

In the infinite variety of order there is a variety of language.

We look upon the worlds hung in the firmament, and in the background we read, "God is power."

We look at their majestic movements as they march through their appointed rounds and we read, "God is majesty."

We look at their infinite complexity, yet beautiful simplicity, and we read, "God is wisdom."

We look at their laws that never fail and we read, "God is truth."

We look at nature's provision for our well-being and happiness and we read, "God is goodness."

But there is one view that nature does not fully give us. There is a more direct vision of Him who hides behind His universe. We look on the face of Jesus Christ and we read, "God is Love."

Nature does not clearly reveal that truth, but our innermost soul says it must be so.

Let unbelief pursue its way and close its eyes to the light that shines from the cross; but as for you and me, let us look upon God as He shines in the face of Jesus Christ, His Son.

An eminent materialist has said that while he can not prove that there is nothing in the universe but matter, he prefers to believe it, as it furnishes him a better hypothesis on which to work.

But the best working hypothesis I have ever found is the Fatherhood of God.

It may answer very well for the methods of materialism to lock God out of His own universe, but as for me, my heart cries out for Him.

Philosophy talks learnedly about the Unknowable, the Absolute, and the Unconditioned, but these terms are icebergs that freeze the soul. To the hungry heart, they are husks; to the thirsty heart, they are only painted cascades.

We are not orphans. It is not a blind force that sits on the throne of the universe, but a living and loving Father, who reaches down from His in-

finite abode and tenderly lifts us in His almighty arms.

Reason can not deny the Fatherhood of God. Our hearts instinctively assert it. However satisfactory may be the evidence of God's existence to the reason, infinitely more satisfactory is the dictum of instinct—the instinct of faith. I may not by pure reason say, "I know that there is a God," but I can say from my innermost instincts, "I feel that there is a God;" and in the face of the inscrutable mystery of existence I would give more for one well-developed, unperverted instinct than for all the syllogisms since the days of Aristotle.

Faith, it is said, begins where knowledge ends. Not so. Faith begins before knowledge begins. Faith is present when knowledge begins. Faith goes along side by side with knowledge, in its widest sweeps, its profoundest depths, and its loftiest heights; and then, when knowledge reaches the limits of its scope, faith goes still on, through the regions of the unseen and the unknown.

I would not degrade reason, but I would exalt the instinct of faith. I believe that He who does not mislead the bee when He plants in it the instinct by which it returns straight to its unseen hive, does not deceive me when He gives me the instinct that impels me to the invisible God and my own immortality.

I thank God for Reason, the light that shines on the world of truth; and in the presence of the deep mysteries of the universe, I thank Him profoundly for Faith—the heat that always accompanies the light, but which penetrates where the light can not enter.

An American citizen was traveling by rail from Paris towards the mountains of Switzerland. In his compartment were two Frenchmen, each sitting by a window and intently gazing upon the changing landscape. Presently one of them shouted, in great excitement: "Voila! Voila! There it is! There it is!" "What is it?" inquired the astonished American. "Do you not see? It is the great Napoleon, yonder on the mountain's brow." "Where is Napoleon?" was the query. "Do you not see him? Yonder is his chapeau; yonder his sword, yonder the outlines of his face. Can you not see him?"

And, strangely enough, there near the mountain's summit was a profile in rock and snow projected against the distant sky resembling in a striking manner the contour of the first Napoleon; and these superstitious Frenchmen were vain enough to imagine that when God heaved up the mountain, He looked forward to the man who was to wade through tears and blood to the conquest of the nations, and had honored him by cutting out his profile on the mountain's brow for the admiration of the ages to come.

But there is an Image on that mountain, and in all mountains, and seas, and suns, and souls. Cole-

ridge saw that image on that very mountain as, one morning before sunrise, he stood in the Vale of Chamonix and looked upon the towering form of Mt. Blanc, whose head rose above the clouds.

" O, dread and silent mount, I gazed on thee,
Till thou, still present to the bodily sense,
Didst vanish from my thought; entranced in prayer,
I worshiped the Invisible alone.

Who sank thy sunless pillars deep in earth?
Who filled thy countenance with rosy light?
Who made thee parent of perpetual streams?

And you, ye five wild torrents, fiercely glad,
Who called you forth from night and utter death?
From dark and icy caverns called you forth,
Down those precipitous, black, jagged rocks,
Forever shattered and the same forever?
Who gave you your invulnerable life,
Your strength, your speed, your fury and your joy,
Unceasing thunder and eternal foam?
And who commanded (and the silence came),
' Here let the billows stiffen and have rest?'

Ye ice-falls, ye that from the mountain's brow
Adown enormous ravines slope amain—
Torrents, methinks, that heard a mighty Voice,
And stopped at once amid their maddest plunge.

Motionless torrents! silent cataracts!
Who made you glorious as the gates of heaven
Beneath the keen full moon? Who bade the sun
Clothe you with rainbows? Who, with living flowers
Of loveliest blue, spread garlands at your feet?

' God!' Let the torrents, like a voice of nations,
Answer! and let the ice plains echo, ' God!'

'God!' sing ye meadow streams with gladsome voice;
Ye pine groves with your soft and soul-like sounds;
And they too have a voice, yon piles of snow,
And in their perilous fall shall thunder, 'God!'

Ye living flowers that skirt the eternal frost!
Ye wild goats, sporting round the eagle's nest!
Ye eagles, playmates of the mountain storm!
Ye lightnings, the dread arrows of the clouds!
Ye signs and wonders of the elements!
Utter forth, 'God!' and fill the hills with praise!

Thou, too, dread mount, with thy sky-pointing peaks,
Oft from whose feet the avalanche, unheard,
Shoots downward, glittering through the pure serene
Into the depths of clouds that veil thy breast,—
Thou, too, again, stupendous mountain! thou,
That as I raise my head, awhile bowed low
In adoration, upward from thy base,
Slow-traveling with dim eyes suffused with tears,
Solemnly seemest, like a vapory cloud,
To rise before me,—rise, O, ever rise!
Rise like a cloud of incense from the earth!
Thou kingly spirit, throned among the hills,
Thou dread ambassador from earth to heaven,
Great hierarch! Tell thou the silent sky,
And tell the stars, and tell yon rising sun,
Earth, with her thousand voices, praises God."

SIGNS OF GOD IN HUMAN EXPERIENCE

Providence and the Individual

IN the heart of the city of Paris stands a beautiful Gothic tower, known as Tour St. Jacques. It was once part of the old church of St. Jacques de la Boucherie. The church was removed in 1789, but the tower was permitted to remain. It is 175 feet high, and the summit is reached by an interior spiral stairway of 310 steps.

Having heard from my youth of the magnificence of Paris, and having been told that the view from the top of this central tower is one of the finest to be had from any of the numerous outlooks, I decided to make the ascent. On entering the tower, I found the walls to be several feet in thickness, and the winding stairway dark and gloomy, except as at regular intervals light was admitted from without, through narrow crevices in the thick masonry. On reaching the first crevice, I eagerly looked out upon the city, but my line of sight fell on scenes of wretchedness and poverty. A little higher, my scope of vision was in line with a narrow and unattractive street. Still higher, nothing was revealed but the

unsightly chimney tops and the irregular level of monotonous roofs.

"What!" I exclaim, "I thought that Paris was a city of parks and boulevards; of fountains and gardens; of palatial private buildings and magnificent public edifices. There must have been a mistake. I see here only squalor, filth, and want."

But wait until we emerge from the gloomy spiral stairway, with its one-sided and narrow outlook, and stand on the open summit with its unobstructed horizon. How different the scene! To the south lies the church of Notre Dame on the beautiful island in the Seine. Still farther on is the Pantheon, flanked on the west by the Palace and Gardens of Luxembourg, and on the east by the Jardin des Plantes. To the east of our outlook lies the Hotel de Ville, Place de la Bastille, and the beautiful Park of Buttes Chaumont. To the north the city stretches away beyond vast warehouses and railroad depots; and to the west the matchless Avenue of the Champs Elysées leads through splendor unsurpassed on the face of the earth. Around the interior of the city the boulevards extend in triple circles with their unbroken arcs of foliage, while through the busiest marts of trade, the River Seine holds its course as it flows under a score of arched bridges towards the sea.

It is folly to judge the city of Paris by the narrow section revealed in looking through a crevice in the Tour St. Jacques. It is unparalleled folly to judge the infinite sweep of God's thought by the

distorted and unrelated view that comes to us through the narrow crevices in the wall between eternity and time—between infinity and the finite.

Let us, then, come cautiously and with a due sense of our limitations to the consideration of our theme.

This is the question which I propose, a question which is seriously asked by many thoughtful persons: Does God take any account of the individual in His government of the world? Does He ever modify His action in the slightest degree for the sake of any individual, or because of anything that any individual or group of individuals may do? Will He change His plans at the request of men? Or, to put it in a more familiar form, will God answer prayer? I exclude from this discussion the case of direct spiritual good, assuming that we are all agreed that God delights to bestow spiritual favor for the sincere asking. I include only temporal good. For instance, will God, in answer to prayer and because of prayer, heal a sick man, send bread to a hungry man, rescue a drowning man, or so adjust the steps of one who is approaching an unseen danger as to bring him to the spot before or after the critical moment, when his ordinary rate of travel would have brought him thither at the exact instant of danger? I do not now ask how God may do these things, but, rather, does He ever intervene for the sake of the individual? Do things come to pass because men ask God for them, and

would such things have come to pass if God had not been entreated?

Now, I will be frank enough to express my conviction at the very outset that we can not demonstrate with any certainty from isolated examples that God either does or does not intervene for the sake of the temporal advantage of the individual, whether in answer to prayer, or of His own uninfluenced will. If it be urged that the remarkable cases of apparent interposition were only coincidences, I should be compelled to say that it might be true. There is room among the infinite number of possibilities for many striking coincidences. We must not, therefore, interpret every apparent intervention of God for the individual as a real case of special Divine interposition. It may be such, but so far as we can prove, it may be otherwise. It may be that there is no such thing at all as a fortuitous coincidence; and, on the other hand, it might be difficult to prove that there is anything in the physical world but coincidence. I repeat, therefore, we must not be hasty in our interpretation of apparent providences.

You are one of a dozen, let us suppose, who agreed to meet at the shore of a lake for a boat ride. You are delayed in unforeseen ways, and on reaching the place of starting are vexed beyond measure to find that your companions, restless with waiting, have gone on the lake without you. Your

disappointment knows no bounds, and you severely censure them for their selfishness. But word comes later in the day that the boat capsized and all were drowned. Then you say, "How providential!" You remember how in your morning prayer you committed yourself to God's protection for the day, and you assert without hesitation that He has intervened in your behalf. But what of the other eleven? They offered their morning prayer with equal faith; and many of them leave helpless families wholly dependent upon them for their daily bread. Are you better than they? Did God select you as the subject of His intervention, and mercilessly leave them to their fate? If He answered your prayer, why did He not answer theirs? It may be that, in fact, He did both. It may be that He intervened as directly in their behalf as He did in yours; but let us not rashly hasten to any conclusion in the case. Let us give God infinite room in which to work His will, but let us not presumptuously claim to know His plans. We see a part of His plan, but what is hidden we know not. We may as well pass judgment on the Brooklyn Bridge by looking at the pen and ink with which the engineer drew his complicated plan, as to judge the infinite plan of God by the little we can see in this point of boundless space and endless duration in which we now have our existence. We may as well judge the city of Paris by what we see through the crevices in the Tour

St. Jacques as to judge God by what we see of Him in the dim light and through the narrow outlook of our environment.

I shall not, therefore, in this address, appeal to history, whether sacred or secular, for those remarkable instances in which God has, apparently, intervened for the sake of the individual. The world is full of noted examples of the apparent interposition of God, from Moses and Elijah down through the centuries to Spurgeon and Geo. Müller. I shall appeal, rather, to your own reason, observation and experience, and to the authoritative dictum of your own consciousness.

I shall assume that God has not tied His own hands; that He is not a disinterested spectator looking on the universe from without; that He has not wound up the great machine and then gone off in a stupor during the ages, waiting for it to run down; and that He is not afraid that the world would go to pieces if He should happen to readjust the laws of His own making. On the contrary, I shall assume that His hands are free; that He is intensely interested in all the affairs of the universe; that His fingers are on the levers, always have been, and always will be; and that He governs the world by the adjustment of His own laws. He can at least do as much as man can do, and what man is there who can not readjust the laws of nature? Can not the engineer reverse his engine without breaking its law? And can not God do as much? Which

is greater, the engine or the engineer? And which is greater, the law of God or the God of law?

But after all, does God answer the prayer of His insignificant creatures? There are times when the most courageous faith falters in the presence of this question, and when the sturdiest soul exclaims from the wreck of hope and ambition, "God does not see the tears or hear the cries of His children."

Let me paint a picture which, with varying shade and color, hangs in every home around the globe. It is Love, looking into the cruel eyes of its relentless foe, the Black Angel of Death. Love prays; the Black Angel mocks. Love pleads; the Black Angel lifts its hand for the fatal stroke. Love hopes; the Black Angel strikes. Love despairs, and the Black Angel hastens on to the next victim. And Love, out of the ashes of despair, asks if there is a God in heaven, and if He can hear a cry from earth.

This picture has too many reproductions. For our purpose to-day, and as the keynote of all that is to follow, let Love be the mother at the death-bed of her child. What cares the Death Angel that the light is going out of her life? She goes to God in prayer. Out of the depths she cries unto Him. She pours forth her heart in agonizings. She forgets herself. She is lost in her child. Human love pleads with Divine love. Finite love pleads with Infinite love. She utters holy vows in the ear of God. She brings forth argument. She solemnly

dedicates her child to a life of holy endeavor, and appeals to God to raise him up from death to a career of blessing. Friends gather around, and the united prayer of good people goes up to the Throne; —but the child dies.

In the presence of this picture, with its varying details, men and women with bated breath ask the question, "Does God answer prayer?"

Let us now seek for some fundamental principles.

Two things are to be considered: What is an answer to prayer, and what is prayer itself?

What is an answer to prayer?

When what we ask is in reality the identical and ultimate thing which we desire,—when we wish that particular thing as an end and do not wish the means by which we can of ourselves attain the desired end, then our prayer is not answered unless we get the very thing for which we ask. The prayer of a starving man is not answered who, on asking for bread, receives a stone; or on asking for fish, receives a serpent; for his immediate want is bread and fish, and not stones and serpents. His imperative need is the end, and not the means by which he can secure the end; for before he can convert the means into the end, he will die of starvation. He really wants bread and fish, and not stones and serpents. If his prayer is answered, he must receive bread and fish rather than stones or serpents.

When in our ignorance we ask for an end, our prayer may be answered by the gift of the means

for attaining the end, and by the denial of the direct gift of the end itself. If you ask for bread and receive a stone, your prayer is answered, provided you can exchange the stone for bread. If you ask for a fish and receive a serpent, your prayer is answered, if you can barter the serpent for a fish. You ask for a dollar, but are given work by which you can earn a dollar. That is a valid answer to your prayer.

When in our ignorance we ask for a particular means for an end, our prayer is granted when that means is withheld, provided a better one is substituted in its place. If you ask for a horse to convey you to a distant point, your prayer is answered when you are refused a horse, provided you receive a railroad ticket as a substitute. What you really want is transportation, and you get a better kind of transportation than that for which you ask.

When in our ignorance we ask for the means by which we may accomplish a desired end, our prayer is answered if the end itself be given, even though the means be denied. If a man ask for money that he may exchange it for bread, his prayer is answered when he receives the bread itself, even though he be denied the money for which he asked.

Let me dwell a moment longer on these fundamental principles, as they are of vital importance. Our prayer is answered when we get our heart's real and ultimate desire—whether we get the means when praying for the end, whether we get one means when

praying for another, or whether we get the end directly, when praying only for the means. Our prayer is not answered when we do not get our real and ultimate desire. Let me multiply illustrations for the sake of clearness.

A child comes running to his father and asks to play with his watch. The father deliberately puts his hand into his pocket and gives the child a silver dollar to play with instead of the watch. He may be pleased with the dollar, but he wanted the watch. He wanted to put the watch to his ear, to open the case and see the mysterious movement of the beautiful wheels within. He wanted one thing for its own sake, but got another; and however pleased he may have been with what he got, his prayer was not answered.

Again, the child asks his father for his watch. The father gives him, instead, a key with which he can unlock the drawer where the watch is kept. His prayer is answered. He asks for an end, but is given the means by which he can readily attain the end.

Again, the child asks his father for a watch, and he in return gives him a pair of compasses. The child wishes the watch solely for a guide by which to draw a circle. The father well knows that the compasses will enable the child not only to draw a better circle, but to draw circles of all sizes. The child asks for a means to a desired end. The father gives, not the means which he asks, but a means

better adapted to the end in view. His prayer is answered.

Still again, the child asks his father for his watch, and he responds, not by giving the watch, but by telling the exact time of day. The child wishes the watch solely for the purpose of finding the time. The father knows that the watch is wrong and will mislead his child; and so he gives, not what he asks, but what he really wishes to know, viz., the correct hour. The child asks for a means solely for a desired end. The father withholds the means, but gives the end at once. His prayer is answered.

Prayer is answered—first, when the end prayed for is given; second, when the end prayed for is substituted by the means; third, when the means prayed for is substituted by a still better means; fourth, when the means prayed for is substituted directly by the end itself.

The mother tears herself away from the dead body of her loved one, and in the bitterness of despair cries out against God because He has turned a deaf ear to her prayer. Is it not possible that God may have answered her prayer, even though her loved one will never smile on her again?

She pleaded with God to spare her child. If that was the ultimate end for which she prayed, her prayer was not answered. That is plain. She asked for his life as an end. It was not granted. She asked for his life regardless of God's knowledge that his death would be best, regardless of her ignorance

of what restoration to life might have cost, regardless of everything but the one end in view. She asked for the end, and it was not granted.

Suppose she asked for the recovery of her child as an end, that end being mutual companionship, mutual helpfulness, and mutual love through as long a period as possible; and suppose that the Omniscient Father saw that the companionship of mother and child for a few years in this life meant their endless separation in the world to come, but that their brief separation in this life meant their endless companionship in the life to come; then her prayer was answered by the denial of the particular end prayed for, and the substitution of the means which would lead to an infinitely better end.

Or, suppose she asked for the life of her child as a means; as a means of good to herself, as a means of good to the world. Suppose that she prayed for his life, not simply that he might live and she might enjoy him, but that he might live to a purpose; and suppose that the purpose could be better accomplished by other means than by his life; then her real prayer was granted, if the other means were substituted, even though the child died and left her desolate. Suppose the other means substituted by God to take the place of the child's earthly life were an increased amount of self-sacrifice and a more consecrated piety in the circle of remaining friends, which could not have resulted from any other cause than this dispensation of God's prov-

idence in permitting the child to die. Then it is evident that the mother's real prayer was granted in the substitution of the more efficient means to the end desired.

Or still again, suppose she desired the child's life to be spared as a means to his own future happiness. Suppose she had looked forward to the time when his name should be on every lip, and when honor and blessing should be showered upon him by an appreciative world. If the child's own good was her chief desire, then that desire may have been gratified directly by the transfer of the child to a better world. She asked for the means to a coveted end, but God gave the end immediately without the means.

The three cases in which prayer seems to be denied, but in which it is actually granted, are,

1. When we get the means instead of the end.
2. When we get one means instead of another.
3. When we get the end instead of the means.

But what of that case in which the end is asked for, but neither end nor means is granted? It is of frequent occurrence with all praying people. They ask, but they do not receive. They seek, but they do not find. They ask for a definite thing, and they get neither the thing itself nor the means by which it can be had. We may talk as we will about the mother's prayer for the life of her child. We may say that her prayer is answered in that her loved one is better off; in that more good comes to the world by the death of the child than could have

come by his life; or in that his premature death rendered it possible that mother and child should be reunited hereafter, whereas if the child had lived he would have fallen into sin and died without hope. We may say all this and more, but still the stubborn fact remains that the mother asked for the life of her child because she wanted that particular favor, and the equally stubborn fact remains that she did not receive what she asked for.

A few years ago, unnumbered petitions went to heaven that Grant, Garfield, McKinley, Queen Victoria, and other world characters might be spared, but these petitions came back unanswered. Is it, then, worth while to pray? If the best men and women on earth go to God in vain for favor, millions of them uniting at the same time in prayer, is it worth while for you and me in our humble way to send our petition to the Throne?

This brings me to my second question:

What is prayer itself?

Prayer is not dictation. It does not imply that the one who makes the request has any such claim on the one of whom the request is made that a refusal to grant it would be injustice. If a refusal is injustice, the petition is not a prayer but a claim. If a man owes me, I do not pray him to pay me; I demand it. If he refuse, he denies, not my prayer, but my demand. We dictate when we have power and authority; we pray when we have neither. Dictation means independence; prayer means dependence.

Further, prayer is not a commercial transaction involving the tender of so much desire and faith on our part as an equivalent for so much return from God in the form of our gratification. If I go into the market with a dollar, I can buy anything that is valued at a dollar. It matters not to the merchant whether I call for sugar, coffee, flour, or vegetables. If I tender the money, he will give me its value in any article I may choose.

But it is not so with prayer. I can not, with so much desire and faith as an equivalent, claim any specific desired good that may be in God's storehouse, and then complain to God, as I would to the merchant, if I do not get my choice. It is not a question of barter.

Apply these two points to the case of the mother pleading with desire and faith for the life of her child: Prayer is neither dictation nor a commercial transaction in which values are indiscriminately exchanged. If God saw that it was best for the child to die, then any persistent demand by the mother for his life, in spite of God's superior knowledge, would have been dictation and not prayer. And since desire and faith can not be measured as an equivalent for any supposed good that we may ignorantly choose, the infinite desire and absolute faith concentrated in the mother's prayer can not be arbitrarily used as an offset against the death of her child.

What, then, is prayer? It is asking God in

Christ's name for what we want, and such prayer is always answered.

But did not the mother want the life of her child? Yes. Did she not send her prayer to God in Christ's name? NO. If her prayer had gone to heaven in Christ's name it would have been answered. "Whatsoever ye shall ask in My name, that will I do." The fact that her request was not granted is sufficient evidence that she did not ask in Christ's name. But did she not say, "For Christ's sake," or, "In Christ's name I ask this favor?" That may be true, but saying it did not make it so. The question is not what she said to God, but, What did Christ authorize her to say? In other words, did Christ Himself ask the Father what she asked Him? When she went to God with that prayer, was it really Christ's prayer that she offered?

You go to the bank to draw some money. There is none deposited in your name, but there is some in the name of your friend. You ask for money in his name. The banker demands evidence that your friend has authorized you to ask for it. If you can not produce the evidence, you get no money. If you produce the evidence, the money is forthcoming. But who is to certify to the banker that you have the authority to draw in your friend's name, yourself or your friend? If you say that you want it in his name, it avails you nothing, unless you can show his name authorizing you to ask it. The only difference between the two cases is

this: In the one case you know whether you ask in your friend's name, and the banker does not know until you present the evidence; while in the other case it frequently occurs that you do not know whether you ask in Christ's name, but God always knows. In the second case you find out that you have not had Christ's authority to ask, only after you have failed to get what you asked for. It follows, then, from this that not every wish carried to God is in reality a prayer; but only such wishes as Christ authorizes us to carry to God.

This being the case, it follows that the mother's petition for the life of her child was not a real prayer, but rather her own ardent wish. If it had been prayer in the strictest sense, it would have been answered. If her wish had at the same time been Christ's wish, her child had not died. It is just as impossible for a real prayer—that is, a wish to God in Christ's name—to go unanswered as it is for God Himself to break His word.

Asking God in Christ's name is the same as asking according to God's will. Christ's will and God's will are one. That alone is true prayer which leaves the result wholly in the will of God.

But here is a difficulty. You desire a certain thing. Either it is God's will that you should have it, or it is not His will. If it is His will, then you will get it, whether you ask or not. If it is not His will, then you can not get it, even if you ask. Hence, there is no need of asking at all.

The difficulty, however, is only apparent. God may make His will dependent on whether you ask or not. In some cases His will may depend on the request of one person; in others, on the request of many. It may be a part of His will that a thing be granted provided one or a million ask for it.

There are some things that it is His will to grant, whether we ask or not. We have air and sunshine; our hearts beat and our blood circulates, and, in general, His laws work, whether we ask or not.

There are other things that it is not His will to grant, however earnestly we ask for them. He will not violate His laws in answer to prayer, however great the number praying, and however sincere the petition offered.

But there are still other things concerning which His will depends on prayer. Of this class some are known and some are unknown. He will never forgive a sin until forgiveness is asked; but the moment it is asked in Christ's name, forgiveness comes. That is known. His will to forgive sin depends wholly upon His being asked. In general, His will to bestow spiritual good depends on prayer, and the bestowment is as sure as the asking. But His will to bestow temporal favors may or may not depend upon the asking. That is unknown. We can ascertain that fact only by trial and by the result. In the case of the mother praying for her child, the result shows that recovery was not His will; at least, re-

covery in answer to the prayer that was offered. It might have been a part of His will that if more prayer had been offered, or a more self-sacrificing and trustful spirit had been manifested, restoration to life would have been the result. Of this, however, we can not be certain. He may make His will dependent on one prayer, on a thousand prayers, or He may make it altogether independent of prayer. When we know that it is dependent upon prayer, as in the forgiveness of sin, our only hope of securing the desired result is by asking. When we do not know that it depends on prayer, but suppose or hope that it may so depend, as in the case of temporal good, we have strong encouragement to pray. If, then, it is God's will, our request will be granted; and if not, we are all the better for having prayed in submission to His will.

One difficulty yet remains. The disease of the child, for whom the mother prays, is either fatal or not fatal. If fatal, prayer can do no good; for God Himself can not restore the child without a violation of His own laws. If not fatal, there is no need of prayer, for he will recover without it.

There is an error in both of these propositions. The disease may not be fatal, and still the child may die from improper treatment. If, now, prayer could affect the treatment, it is evident that prayer might save the life.

In the other proposition there is also an error. The disease may be fatal in the present state of

medical science, but with new remedies it may be readily curable. That is, a disease may be fatal under one set of circumstances, but not so under another. If, therefore, prayer could lead to the discovery of new adjustments or remedies, a disease which would be fatal without prayer would be curable with it.

The only question, then, is, How can prayer lead to these new adjustments and combinations of law, without which the disease would be fatal, but with which it is curable? Might we not as well ask God to stop the rushing locomotive with its thundering train in order to save the life of the infant that lies asleep on the track around the bend? I think so. The cases seem to be parallel. Unless the forces at work can be counteracted, the disease on the one hand will hasten on to death, and the locomotive, on the other hand, will crush the infant as it would an insect. But what impels that engineer, who can not see the helpless infant beyond the curve, to put on the air-brakes and stop the ponderous train within a foot of the sleeping babe? You may say what you will, but I believe that he may have received the impulse straight from God, in answer to the mother's prayer that He would watch over her darling.

You have had unaccountable impulses at critical junctures, and so have I. I am not now roaming in the realm of fancy, but standing solidly in the domain of fact. I speak what we all know. How we came by these unforeseen impulses, neither you nor

I can explain. The fact remains, we do have them. The further fact remains, that by reason of these impulses, changes occur in the physical world which would not have taken place without them. Human mind can, in some mysterious way, influence human mind. This is peculiarly true in the case of kindred spirits, such as husband and wife. Is it asking more —is it, indeed, asking as much—to suppose that God Himself can by spiritual contact give impulses to His creatures, whether animals or men,—impulses that shall lead to physical changes through human or animal instrumentality that would not otherwise have occurred?

The mere lifting of the hand displaces a few cubic inches of atmosphere. The disturbance will affect every molecule of air around the globe; the effect, of course, diminishing as the distance increases; but this disturbance may be sufficient to break an equilibrium at a critical point, and, as a consequence, rain may fall on a drought-stricken land, or famine and pestilence may be driven away from a suffering people. Thus through human or even animal instrumentality, God may work countless changes in the physical world, and all in accordance with law. The impulsive motion of the hand here may result yonder in changing what would otherwise have been a different order of nature. God may send the impulse, either in answer to prayer or without it, the form of nature may be changed, and law still be executed.

In obedience to such an unforeseen impulse, the

engineer may have stopped his train in time to save the life of the helpless infant, and that impulse may have come from God in answer to the mother's prayer.

Do you say, why did not God watch over that other darling committed by that other devoted mother with equal confidence to His care? Why did that other locomotive go on to its work of death? Is God a respecter of persons? Was the mother whose child was spared better than she whose child was mangled? God alone can answer that question in full; I can not. I have attempted to answer it in the former part of this address. But whether I have answered it correctly or not, it was best that one should live and the other should die, or God would not have had it so. Shakespeare says:

> " We, ignorant of ourselves,
> Beg often our own harms, which the wise powers
> Deny us for our good; so find we profit
> By losing of our prayers."

Now, if God can, without violation of law, impel the engineer to stop his train before it reaches the fatal spot, may He not impel the physician to such an adjustment of law and correlation of remedies as would render curable that which would otherwise be a fatal disease?

I do not know that I have solved the problem. I am quite sure that I have not fully solved it. I think I have found, at least, one value for the unknown quantity; how many other values it may have

I do not know. But it seems to me plain that God does readjust His laws by means of His volitional creatures. These creatures are susceptible to direct impulses from Him. Under these impulses they do what would have otherwise been left undone. These impulses may—I believe they do—come as a direct answer to prayer; and God's laws, though readjusted and modified, may still remain inviolate.

In answer to prayer, God will, if He see fit, send us rain, give us bountiful harvests, turn away famine and pestilence, and raise our suffering loved ones to health,—and all in the execution of His own laws that may have been readjusted as a direct or indirect consequence of our prayers.

But it remains for us, who ask God for temporal good, to leave the result wholly in His wisdom and love, and rest in the assurance that all things work together for good to those who love Him. His dealing with us may seem strange, but if we put ourselves and our all in His hand, the final outcome will demonstrate His wisdom and love.

Anthony Comstock, when a boy, had smallpox. His mother, doubtless, wondered why God should send upon him an affliction that would mark him for life.

Anthony Comstock, when a man, fighting vice with a faith that never wavered and a courage that never faltered, received through the mails, at a time when the cause of purity could not spare him, a package of smallpox scales, sent by his enemies to end his career.

But God knew better than the boy's mother knew, and sent him immune from smallpox into his life work. And Anthony Comstock, all honor to his name, still lives and fights for God.

With all my heart I believe that God answers prayer, even for physical good. I do not believe that He has locked Himself out of His own universe and thrown away the key forever. He has made his own laws, but His laws have not made Him. The Maker of law can adjust law according to His will, and He can, yea, and He will, so adjust law as to make it the servant of the humblest individual on the globe; and if this most insignificant individual asks God for what he really needs, God will, in return, marshal all law in his behalf. In answer to prayer He will go with Abraham to the summit of Mt. Moriah and will stay his trembling hand as he lifts it for the fatal stroke; He will take Joseph from the loathsome prison and set him on the throne of Egypt; He will walk with Shadrach, Meshach, and Abednego into Nebuchadnezzar's furnace and ensheathe them with the fire-proof garments of His divinity; He will descend with Daniel into Darius' den of hungry lions and appease their thirst for blood by His magic power; He will stand with Elijah on Mt. Carmel and, having answered him with fire from heaven, will lift the clouds from the Mediterranean and pour out upon the famine-stricken earth His refreshing showers; He will follow the funeral procession from the gates of the city of Nain, and

deliver the widow's son from death to her joyful embrace.

In answer to prayer He will array all the forces of the universe in behalf of the humblest individual. The wind will drive his sails over all oceans; the fire will make his engines throb on land and sea; water will drop from the clouds to quench the thirst of his parched fields, or it will form in dewdrops on his drooping lilies and his curling blades of grass; the mines will lay gold and silver at his feet; the beasts of the field, the fowl of the air, and the fish of the sea will be his servants hastening to do his will; the deadly mineral, the poisonous herb, and the venomous reptile will be his ministering angels of health and life; the earth will yield her increase for him; the moon will lift the tides for him; the sun will shine for him; the very stars in their courses will fight for him; and he will find himself the royal heir to an inheritance of infinite possibilities as one of the immortal sons of God.

GOD WITHOUT SIGN—FACE TO FACE

Seeing Without Eyes

He endured, as seeing Him who is invisible.—Heb. xi, 27.

YOU can open your eyes on a summer evening when the sky is both smiling and weeping at once, and see a rainbow on the black clouds of the east. It is a vision of beauty worth going around the world to see. You can close your eyes by day or by night, and see a vision more beautiful than the rainbow in the eastern sky. It is the truth on which the rainbow hangs, eternal as the very Artist who passed His brush across the clouds. A raindrop starts from the heights towards the earth. It begins on a path of truth—God's truth, valid before the world was, and valid after the world shall have ceased to be. It continues through its fall with God's thought in it. A ray of light, another thought of God, strikes athwart the drop in mid-air; it enters invisible; it is torn into a million threads of matchless hues, and before the drop has reached the earth it has served to mirror the eternal truth of God upon

the angry sky. It is more beautiful to the soul that a rainbow can be, than to the eye that it actually is.

Open your eyes and you behold the lily, a vision of beauty on which God must delight to look. Close your eyes and you see something beyond, more beautiful than the grace of its form or the purity of its bloom. You can close your eyes and see the truth of God marshaling the atoms of the lily in line, as with unerring precision and unfailing certainty they take their appointed places in the petal's curve of beauty.

More beautiful than the rose is the truth that makes roses possible. More beautiful than the song is the truth which mounts the crest and descends the sinus of every wave as it bears the song to your delighted ears.

Open your eyes, unstop your ears, put forth your hands, and lo, a world of sense, full of charms and freighted with delights! Close your eyes, seal your ears, withdraw your touch, and lo, a world of truth, invisible to sense, but full of lovelier charms and freighted with richer delights! The sight of truth with the eye of reason is more beautiful than the rainbow. The sight of truth with the eye of imagination is more beautiful than the lily. The sight of truth with the eye of memory is more beautiful than the song.

But there are visions yet more beautiful. You can, it is true, open the eyes of your intellect and

see the truth of God, a sight unmatched by springs of water or hillsides of green or flowers or trees or mountain peaks or sea or sky; a vision worth all the cost of human life to see, with its pains, its toils, its tears, its sacrifices, its deaths; for the sight of truth is a glimpse of destiny. But you can close the eyes of your intellect and see a vision (shall I say it?) more beautiful than truth itself; a picture more beautiful than memory ever painted, or reason ever gazed upon, or imagination ever glimpsed. It is a vision of the Invisible. It is a sight of the Thinker. It is a glimpse of God.

More beautiful than the picture is the thought of the artist; more beautiful than his thought is the invisible essence itself which thinks.

How do we see the picture or the lily or the rainbow? With the eye of sense. How do we see the truth of which the rainbow, the lily, and the picture are the mirror? With the eye of reason. How do we see the invisible essence which is behind all rainbows and lilies and pictures, and still behind the truth on which they all rest? That is a vision seen without eyes by the direct and immediate gaze of faith.

Reason sees beyond the senses. Faith sees beyond both the senses and reason. If the sight of reason is real as that of the senses, so is the vision of faith as real as that of reason, and the invisible itself as real as the visible. The vision of the senses is mediate, through a physical organ and by a process

of steps. The vision of reason is also mediate, through a process of steps, but without the organ of sense. The vision of faith is direct, immediate. It needs no organ of sense, no process of steps. It sweeps down upon the truth from above; it does not need, like reason, to climb to it from below. It reaches its destination by a straight line; it does not need, like reason, to tack right and left to catch the favoring gale. There is no veil between faith and the face of God. The eagle looks undaunted at the sun; reason looks undaunted at the uncreated splendors of truth; faith looks undaunted at the source of truth,—the truth behind the truth. It touches its face against the essences that think, and gazes unhurt into the very face of God. Sense grasps the truth of sense. Reason does the same, but stops not there; it grasps the invisible truth of reason. Faith does all this, and more; it grasps the truth of truth. Sense is limited to the world of matter; reason is limited to the world of thought; faith is universal and unlimited in its scope. Like reason, it begins with sense, but it does not end there. It continues through reason, but it stops not with its boundaries. For long after the eye of sense closes at the coming of truth, and long after the eye of reason closes to the oncoming glory of the invisible, faith is gazing without eyes upon the matchless sight.

Faith sees, but it sees without eyes. Yea, that is faith; seeing without eyes, hearing without ears, and touching without fingers. It is the direct and

unveiled gaze of the soul on truth and on the essence behind the truth. Faith is seeing the invisible, hearing the inaudible, and touching the intangible. It is the immediate contact of the soul with God, with all essences, and with all truth. Faith is divine sight and divine insight. It is an instinct of the soul moved and moving by the impulse of God. It is pre-eminently that function in men that makes them partakers of the Divine nature.

You live in an era and under conditions that give a severe test to your confidence in the validity of faith. You have learned that in the great departments of human thought, nothing must be taken for granted. Everything must be reasonable; everything must have a reason and a sufficient reason. It was not enough that the text-book asserted a fact; you must see it for yourself. It was not enough that your teachers claimed to know, and authoritatively declared what they believed to be the truth; you must know for yourself. You went into the laboratory and looked with your own eyes. You went into the library and made your own investigation. Whatever may have been the opinions of others, you were not satisfied to take them on mere faith, but you must see. When you could not see, you either denied, doubted, or despaired. You have challenged every fact within the range of your observation to give a reason for its being. In the midst of these trying processes some of you may have staggered at the demands of faith; some may have doubted the

validity of faith; yea, some may even have had dimmed the brightness of your faith in faith. Having seen with eyes, heard with ears, and touched with fingers, you may wonder if, after all, there is any essence that can be touched without fingers, or any truth that can be seen without eyes.

My message to you, therefore, shall aim to show you the validity and authority of faith, with the hope that you may all lovingly accept that religion of which it is the foundation. If faith is superstition, the Christian religion is a fetish. If faith is childish, the Christian religion is not adapted to men. If faith is unreasonable, the Christian religion can not claim the respect of thinking persons. If faith is a reminiscence, the religion of Jesus Christ is doomed. If the world shall ever outgrow faith, the religion of the Gospel is too narrow for the coming centuries. When faith goes, Christianity will disappear, and its Author will be forgotten among men. For whatever the religion of Jesus Christ may be, its foundation stone is faith.

But is it a valid foundation? Would it have been better if Christ had built His system on the senses or reason, rather than on faith? Would it, thus founded, be better adapted to the intelligence of the twentieth century? Have the methods of modern science so unbolted every door and penetrated every hiding place, that men can not now be intelligent and follow a religion that is built on faith? The twentieth century will have little reverence for

the unknown or the mysterious in the realm of matter. It will have great reverence for tangible facts. Is there any reason why the twentieth century shall have equally little reverence for the unseen in the world of spirit? Are there no facts which are invisible? Will the religion of Christ, which has the unseen for its foundation, become unworthy in the thought of the twentieth-century man?

I have one far-reaching proposition. It is this: All the activities of human life, physical and intellectual, proceed on faith. It has always been so. It will always remain so. Life itself is a continuous act of faith. What Bourdillon says of love can be said with equal truth of faith:

> " The night has a thousand eyes
> And the day but one;
> Yet the light of the whole world dies
> With the dying sun.
>
> The mind has a thousand eyes
> And the heart but one;
> Yet the light of a whole life dies
> When (Faith) is done. "

I.

The processes of life are illustrations of the validity, authority, and universality of faith. The fires of physical life are kept aglow by eating, drinking, breathing, sleeping, exercising, and the like, every act of which rests on faith.

As I speak to you the air of this room is pouring

into your lungs. Whence came it? From everywhere; from other lungs, both human and animal; from hospital and dungeon; from the upper rim of the atmosphere and from the dank caverns of the earth; from kissing the dewdrop and from fanning the fevered brow; through the spray of the waterfall and through the poisonous breath of pestilence. It has come from where death is, and it may bear death on its wings. But you open wide your lungs to receive it and to bid it welcome. Do you know what it contains? Have you analyzed it to discover if any poisonous germ lurk within? Do you stop to scrutinize every one of the innumerable molecules, as it enters your lungs, to determine whether it is oxygen to burn up the accumulating poison in your bodies or a microbe bringing in new death? Just how long would you live if you stopped to question every atom of every current that flows into your lungs? You breathe by faith. You trust the unseen air. If you could see the invisible current as it rushes into your tracheal passages, you might be tempted to "hold your breath;" but you banish microscope and spectroscope and bid the air welcome, though it may bear disease and death in its wake.

And consider the bread you ate at your morning meal. It grew in the fields where the air of heaven blew over it, and the rain and sunshine fell upon it. That was God's work, and you could well afford to trust it. But men gathered it in sheaves. Was there no room for treachery there? Men whisked

it through the threshing machines; might naught but the dust of the thresher have settled among the shining grains? Men poured it into the garners; did no fiend in human form lurk near? Men transported it to the elevator; what chance for diabolism! Men took it to the mills; who watched the teamsters that they did not betray their trust? Men ground it between great stones; can the untutored eye distinguish flour from strychnia? Men bartered it for the baker's gold; but gold will buy poison as well as flour. Men mixed it in their kneading troughs, baked it in their ovens, and delivered it at your doors; do you know that there was no "death in the pot?" Are you sure that there was no treason against human trust in the long train of men between the farmer who sowed his grain and the cook who placed the tempting loaf on your breakfast table? You eat by faith in a thousand men whom you never saw and never will see.

Do you remember that summer afternoon when you wandered in the woods? How your limbs began to tremble with faintness and your nerves became unstrung as your thirst came on apace, and every atom in your body at last cried out for water! Do you remember the gushing spring on the hillside; how you hastened thither; how the white pebbles braced their tiny shoulders against the current, breaking the glassy surface into dimples of marvelous beauty? Do you remember how on hands and knees you bent forward to slake your burning thirst? Whence came

that water issuing from the earth? From the clouds, through air tainted with poison; over rocks on which the venomous reptile had sunned himself; through poisonous germs and fetid remains in the soil; through vaults and caverns where disease breeds and death reigns; through fields of verdure and fissures in the rock; at last, leaping with joy, through the crust of earth into the sunshine and air. Did you have your microscope with you? Did you stop long enough to see the telltale lines of death in the spectroscope? You slaked your thirst by faith in God and the uniformity of His law. You stopped not to look; you trusted. You waited not for the voice of reason; you had heard the voice of faith. With eyes some things are invisible. Without eyes some things can be seen.

And when you lie down to sleep, whether or not you think to offer up to the good Father a prayer of thanksgiving for the mercies of the day and a petition for protection through the shadows of the night, you close your eyes in faith that you will open them again with the morrow's sun. Who will stand by your bedside with bellows to force the air into your sleepless lungs,—or, indeed, may they not fall asleep and fail you, when you have forgotten them in your slumber? Who will keep His hand on your heart and see that it pumps on when you are unconscious? Who will build the fires in your dead cells to consume them and to make way for new ones? Who will marshal the living cells and keep them at work

through the long hours of the night, building up what you tore down by the activities of the day? When you fall asleep, you go out of consciousness with an abiding faith in something or Somewhat, that you will return to consciousness with the new day. You would not dare to close your eyes in slumber this night, if you mistrusted that the machinery of your bodies would stop before the morning light. You would force yourselves into wakefulness by torture and by terror, day after day and night after night, until your wills at last succumbed to nature. Take out faith in the safety of helpless sleep, and the human race will become a pandemonium of madmen.

When a ray of light enters your eye, the atoms of the invisible ether strike your retina with almost infinite velocity as they vibrate back and forth in their infinitesimal paths. The red wave makes 450,000,000,000,000 vibrations a second between the molecules of your retina, setting them going at the same inconceivable speed; while the violet wave makes double that almost infinite number every second. And yet you do not hesitate to look at the rose or the violet lest your eye be shattered by this unparalleled bombardment.

So I might go through all the processes of living, and find faith at every step. If you must reason before you trust, you will die before you reach your conclusion. You live by faith. Your physical life is a continuous act of faith. Even when you think you stand on reason or sense in the process of living,

you will find the sub-foundation to be faith. The stars are still shining when the sun is on the meridian, and faith is still in the firmament when the blazing light of reason seems to overpower it. The processes of living are mainly faith in the Divine Preserver and in the uniformity of His law.

II.

The relations of life are, equally, illustrations of the validity, authority, and universality of faith. The act of living is faith in the superhuman; the relations of life show faith in the human.

A few years ago some of you started to college. You trusted the future. What assurance was there that you would live to see your graduation day? You bought your railroad ticket, not knowing whether the train would deliver you at your destination. You paid your college fees, not knowing whether you would reach the end of the term. You entered upon new paths of study, not knowing whether you could find your way. You made new acquaintances, whom you at once trusted as old friends. You looked forward to commencement day, hoping and believing that it would come; and you then looked forward with confidence to other summits of achievement in the future, believing that you would successfully reach them. If you had put no trust in the future, in unseen and unknown persons, in untrodden paths, in untried experiences, but had demanded that your

eyes must see in advance, your ears hear, and your fingers feel, would you have reached even the first goal of your ambition? If you had dethroned faith throughout your college life and had enthroned sight, do you really think you would have seen as much during these happy years with eyes as without them? O, what visions you would have missed, if you had kept your eyes wide open and demanded to see; and what sights you have seen when with covered eyes you have confidently touched your faces against the face of truth!

What you have done in school and college with shuttered eye and ear and sense, men have been doing everywhere on land and sea; and what men in this age of history do by faith in their fellows and in God, they have been doing since the world began, and will continue to do until the human race is no more.

In your relations as students you have proceeded on faith. Is it not equally true in your relation as sons and daughters in the family? Suppose you should lose your faith in your mother, whether she be on earth or in heaven, what further ambition could you have in life? What would become of the castles you built in air, but which you expected to bring down to solid earth? When faith in your mother goes, with it goes faith in humanity. If her love was not unselfish, then all love is selfish. If her thought for you was also a thought for herself, then there is no such thing as patriotism,

philanthropy, or charity among men. If she does not reign on the throne of your faith, then there are no thrones in the world worth striving for. Or, suppose she, in turn, has lost her faith in you. True, that will be long after everyone else has ceased to believe in you; but if that time should ever come, what a dreary desert life would be to her! Even then she would find many an oasis, where faith in you would spring again to life; but what sight under the stars sadder than sons and daughters looking into their mother's eyes and finding no response of faith! Let the husband lose faith in the wife; the wife in the husband; the brother and the sister in each other; let suspicion and fear of infidelity creep into the inner circle of the home, and the family will disappear as an institution among men. O, pure and holy was the faith that was born with your birth, that was developed in the nursery, that grew brighter around the fireside and the evening lamp, that kindled into hope and love, and that you would not extinguish or suffer to be extinguished for a crown and a throne!

Or, go into society. What is the bond that holds the community together? It is faith of man in man. True, we lock our doors and bar our windows at night. And why? Because some men are unworthy to be trusted. But these are the exception, not the rule. Where there is one thief, there are a thousand honest men. Suppose all were thieves and cut-throats? Then must society disintegrate, and

every individual stand alone for himself. But the majority of men have faith in the majority of their fellows. That is why men do not go armed night and day to defend themselves from deadly assault. And if more men had more confidence in more of their fellows, the bolts in our doors and the bars to our windows would become needless devices. Men may, with impunity, open the doors and windows of their houses as widely as they open their hearts to their fellows. They may, with safety, expose their treasure as publicly as they show their faith in men. They may, and will in the civilization to come, throw away the key to their unlocked safety vaults when they throw away the key to their wide-open hearts. Strikes will disappear as faith appears. Strikes will cease when universal faith of man in man begins. The restlessness of the unemployed will vanish when the employed show their faith in them. The anarchy of the hungry will disappear before the oncoming faith of the fed in the unfed. Society will become strong as faith appears. Society will become indissoluble when the faith of man in the manhood of men becomes universal and permanent.

Or, look out upon the world of commerce. How long would the wheels of business revolve, if faith were dead? If faith of men in men, whether acquaintances or strangers, friends or foes, should disappear to-day, to-morrow your banks would not open; your stores would remain locked; your shops would be silent; your manufactories would be still; your

railroad cars would lie on the sidetrack or stop midway between cities on the open line; your schools would close to open no more forever; your church bells would be dumb and your pulpits deserted; your wheatfields would go unharvested, and your cornfields would be left to the weeds; your steamers would line the river banks, and your steamships would stop in mid-ocean; your telegraph sounders would cease clicking, and your printing presses cease rumbling; all the avenues of commerce would be deserted, and all the hum and hurry of business would be turned into the silence of the grave. The life, the very possibility, of commerce is faith, not only of man in man, but of men in men.

Or, look at human government. There is the mutual trust between ruler and subject. Happy is the nation in which that mutual trust is perfect; the people securely resting in their confidence towards their public servants and towards each other; and the officers of government confidently relying upon the incorruptible integrity of the people. Law is for the exceptional criminal, not for the masses of the upright. The people trust each other, and they have faith in the majesty of the law. But when this trust becomes weakened with suspicion and fear, through the corruption or imbecility of the courts and through the maudlin sentiment or demagogical devices of gubernatorial authority, then the terror of the people rises above the supremacy of the law; and mob, riot and anarchism take the place of courts of injustice

and executive inclemency. James Lynch, mayor of Galway, would not have executed sentence of death with his own hands against his criminal son, if Irish justice had not closed its eyes to the crime; and Judge Lynch would never have crossed the sea to set up his informal court in this land of ours, if justice had not been blind or idiotic, and executive mercy degenerated into a politician's trick. I deplore the reign of mob law in some parts of our land, and the existence of the mob spirit anywhere; but more deeply do I deplore the degeneracy of faith in justice, which has created the mob, and which will continue it until faith in justice becomes universal. The keystone in the arch of human government is faith of men in men.

III.

I have said that both the processes and the relations of life proceed on faith. I go one step farther: the philosophies of life are built on faith. If this be true, then faith is universal, and is not only a worthy foundation for the religion of Christ, but is the only foundation possible.

The three questions, the answers to which include all knowledge of all kinds, are, WHAT, HOW, and WHY. WHAT is the question of history. HOW is the question of science. WHY is the question of philosophy. Included in the WHAT of history are WHO, WHICH, WHEN, WHERE, WHENCE, WHITHER. Pure history deals with facts; nothing more, nothing less.

What is the fact—that is the question of mere history —and it goes no farther. The relation of fact to fact is the question of science. It goes no farther. It presupposes the knowledge of the fact, and is, therefore, dependent upon history. There may be history, pure and simple, without science, but no science without history. The knowledge of the facts of the world or of the universe, whatever they may be, is given by history; and if we stop there, we have neither science nor philosophy. The relation of the facts to each other is determined by science; and if we go no farther, we have history and science, but no philosophy. The reason for the fact as determined by history, or the reason for the relation of facts as determined by science, is to be given by philosophy, if given at all. Philosophy depends on history for the facts for which it proposes to account, and it depends on science for the relations which it proposes to explain. There can be no philosophy of facts without history, and no philosophy of relations without both history and science.

So far as *relations* and *reasons* are regarded as *facts*, they fall, of course, under the question, *What;* and to that extent and in that sense, they belong to the domain of history. Under this limitation, history, therefore, overlaps both science and philosophy, and the historian, in this case, performs the functions of both scientist and philosopher, as well as those of the mere annalist.

Let it not be forgotten that by science we always

mean the science of history. Biology is the science of biological history. Physics is the science of physical history. Sociology is the science of social history. Politics is the science of political history. In general, universal science is the science of universal history. The science of history, whether physical, chemical, biological, political, or general, is the determination of the relations of the facts of history. The philosophy of history proposes to account for the isolated facts of history. The philosophy of science proposes to account for the relation of facts. What is ordinarily called the philosophy of history is in reality the philosophy of the science of history. The real philosophy of history is nothing more than the attempted explanation of its isolated facts as ultimate entities. The so-called philosophy of history, as ordinarily understood, is really an explanation of the cause of relations, and should be called the philosophy of science.

But both history and science proceed on faith. Therefore, all philosophy must be founded in faith.

Look at history; that is, at isolated facts. Who knows the history of the past at first hand? Does the historian himself so know it? Was he present when Cheops built his pyramid; or when Alexander invaded Asia; or when Menelaus laid siege to Troy; or when Cæsar crossed the Rubicon; or when Napoleon met his fate at Waterloo; or when Bunker Hill suddenly rose to be the highest mountain in America; or when Abraham Lincoln became the great-

est soul of his century? Was the historian present when Priestly discovered oxygen; or Leverrier saw Neptune with his logarithms before Dr. Halle saw it with his telescope; or when Shakespeare created Hamlet; or when any of the innumerable facts of history—biological, physical, sociological, political, or cosmological, were first discovered and announced to the world? The historian recites the facts to you, but who recited them to him? And who recited them to his teacher, and to his teacher's teacher, back through the long line of men to the one who touched the original fact? For every fact of history that you accept, you exercise faith, not only in your historian, but in his faith in his historian, back to the beginning. That is, you unequivocally declare your faith in faith.

Go a step higher, from history into science; from isolation to relation; from the fact of the fact, to the manner of the fact. The chemist shows you in a test tube an invisible gas. He tells you that it is oxygen. That is not science; it is history. He may at times be a chemist; he is now a historian. He shows you in another test tube a double amount of another invisible gas. He calls it hydrogen. That is still history, not science. He puts the two invisible gases together; he touches them with a spark; they disappear, and a liquid drop appears in their stead. He tells you that it is water. That is still history, not science. But how came the drop of water? That is science. Look at the drop; that is

history. Look beyond the drop to the manner of its coming; that is science. The relation of hydrogen to oxygen is such that when two measures of the one are heated with one measure of the other, they both disappear and water appears. That is science. Give the chemist two volumes of hydrogen and one of oxygen and he will prophesy with the certainty of mathematical demonstration that when they unite, the product will be water; and he will prophesy that this will be the result wherever these gases may have been procured or whithersoever they may be transported. If they come together on the planet Jupiter or on the most remote satellite of the most remote star, the drop of water will be the invariable result. All he can say, as a chemist, will be that such is the relation between two volumes of hydrogen and one volume of oxygen that under given circumstances they will unite to form water. That is science; it is more than history, but not as much as philosophy.

This determination of relations is science, whatever be the nature of the facts. Take, for instance, political facts. Here are oppressed citizens. That is history, not science. Here is the tyrant who oppresses them. That is still history, not science. Here is a conflict. The conflict itself is still history, not science. How came the conflict? That is science. The relation between the oppressor and the oppressed is such that when they come in contact, there is a conflict. That is science. You can prophesy when a conflict will come, if you know when the elements

of a conflict exist. That is science. History, as such, is not a prophet, but science can see into the future. How can science prophesy? Simply by faith, and by faith alone; by faith in the stability of relations. If relations are not unchangeable, oxygen and hydrogen may next year unite to form gold instead of water, and the tyrant and the oppressed may, in the twentieth century, lock arms in love instead of hate. The perpetuity of relations is the ground on which science predicts the future, and the only possible warrant for this ground is faith. Who has looked far enough into the future to bring us back word that relations are permanent? Who has visited other worlds and universes to ascertain whether relations are universal? Faith in the oneness and persistence of human nature, and in the continuity and uniformity of God's law, whether this law be in humanity or in the physical universe, is the ultimate basis of all science.

History and science both depend on faith—faith in the uniformity and continuity of law; how much more so, then, philosophy, which depends on both science and history! The validity of the answer to the questions WHAT and HOW lies in the validity of faith. Much more so, therefore, the validity of the answer to the question WHY, which presupposes both WHAT and HOW.

Apply the question WHY to history. Why any one isolated fact in the universe? What is the ultimate reason of its being? Philosophy is dumb before

its own question. Or, apply the question WHY to science. Why the relation of continuity and uniformity in nature? Philosophy is equally dumb before this, its other question. Nothing is left but to accept both fact and relation without knowing why; and if without knowing why, then upon pure and absolute faith. The ultimate foundation of philosophy is faith; consequently, the ultimate foundation of all human knowledge of all possible kinds is faith.

The proposition with which I began is, therefore, true—all human activity proceeds upon faith.

Shall we draw the partial picture of one day of human life with faith dead? Here it is: You dare not remain at home; you equally dare not go forth. If you are at home, you tremble with fear lest your house fall upon your heads. You can not investigate to see whether every nail is in its place, every joint tight, every joist sound, every rafter secure, every screw driven home, for you dare not move. You can not trust your limbs to sustain your weight, your muscles to respond to your will, your nerves to bear their message, your heart to keep on beating, your lungs to keep on breathing, your stomach to continue digesting, or your blood to continue flowing. If you try to reassure yourself by an investigation, you may lose your way, for your eyes may prove treacherous or altogether lose their power of sight. You can not remain where you are, lest disaster befall you; you can not walk forth, lest greater disaster meet you. The earth may open to receive you.

Your friend may have become your enemy and may be lying in wait to harm you. The laws of nature may be reversed, and gravitation may become levitation, and you may start for the zenith when you attempt to set foot on the solid earth. You can not eat, for you dare not trust your food. You can not quench your thirst, lest there be death in the cup. You can not ride upon the cars, for they will not run; or if they do, you dare not trust the engineer, conductor, brakeman, switchman, or train dispatcher. You will not risk a letter in the mails, for the postman may abstract it, or the mailing clerk may open it. You will not send a telegram, for the operator may deceive you. You dare not look in your mother's eye, for she has no faith in you or you in her. You are afraid of your friends and your enemies alike. You are afraid of the world, afraid of God, and afraid of yourself. You can not think, for you have lost confidence in your intellectual powers. You are no longer sure that reason is reasonable, that memory correctly calls up the past, that imagination paints worthy pictures, that intuition sees the truth, or that your eyes, ears, and fingers see, hear, and touch the world of sense. You have hitherto trusted the powers of your soul. Your only final warrant for the validity of your mental processes has been faith. You had faith in your memory, and, therefore, you relied upon it. You had faith in your reason, and, therefore, it spoke to you as with authority. You had faith in your intuitions, and hence you rested in

them. You had faith in your perceptions, and they were realities to you. But now you have lost your faith in faith, and all is gone. Now that faith is dead, reason, intuition, memory, imagination, perception, all fall to the ground; for they hung on faith; and when faith fell, then fell they all together. Then history became a delusion, science a myth, and philosophy an impossibility. Ah, sad will be the day when faith is dead! Hope may die, but the present will remain. Love may die, but the past will be secure. When faith dies, the present, the future, and the past will all go down into one common grave.

The one thing to which you must hold fast with the grip of despair is faith. The one thing which you can not let go, however much you may try, is faith.

Now, I do not ask you to exercise faith in the contradictory, the unreasonable, the impossible, or even the improbable. Faith is trust, but it is rational trust. When it is not reasonable it is no longer faith, but credulity or presumption. It is not faith that you exercise when you take a viper to your bosom; that is presumption. It is not faith that you exercise when you believe the improbable or even the probable without evidence; that is credulity. Faith has no eyes; nevertheless it must see. And what it sees must accord with reason. If any religion requires of faith the contradictory, the unreasonable, or the impossible, then it is a superstition, and an imposture; and the sooner it disappears from the

world, the better. If the Christian religion demands the unreasonable, the impossible, or the contradictory, reject it; for you can not insult your own intellectual constitution. If what it requires, however inexplicable, is possible and reasonable, and if its ends are noble and as far-reaching as destiny itself, accept it, even though it does rest upon faith.

After all, did Christ make a mistake when He put under His religion as the foundation and into its arch as the keystone the universal instinct of faith? Will the intellectual storms of the future overturn it? Will the human nature of posterity so change as to offer no response to it? Will the twentieth century outgrow it; or the 200th century, or eternity itself? If the Christian religion had been founded upon any principle not universal and eternal, its history would have been limited to the extent and duration of that principle. But it is built on the foundation of all foundations; and it will, therefore, endure while any foundation remains. The man who rejects the Christian religion because its foundation is faith, rejects all systems, all philosophies, all governments, all knowledges,—yea, he denies himself and he annihilates the universe.

I have tried to exalt faith in your eyes, that I might exalt before your vision the religion of Jesus Christ. Faith is not only the foundation of the Christian religion, but it is the inspiration of men in the battle for destiny; a destiny which the Christian religion opens to their view. Faith in God and in

Jesus Christ is the inspiration of destiny, because it is the prophecy of destiny.

"By faith Moses forsook Egypt, not fearing the wrath of the king: for he endured, as seeing Him who is invisible." The soul that catches a sight of the invisible God has a glimpse of destiny. And the soul that gets but a momentary glance at its destiny gets with it an inspiration of courage that will not falter before the wrath of kings. Moses endured as seeing Him who is invisible. The soul that sees the Invisible will endure. It will endure the wrath of Pharaoh; it will endure the loss of wealth, place, honor, and power; it will endure the bitter murmurings of Israel; it will endure the weary marches and the hot battles in the wilderness of Paran; it will endure the taunts and jeers of an ungrateful and rebellious people; it will endure the disappointment of falling short of Canaan, although in sight of its verdant fields; yea, in all ages, it will endure prisons and wild beasts and flames and stormy seas and death; for it has caught a glimpse of destiny, and it "endures, as seeing Him who is invisible." It has caught a sight of God, and the vision is an inspiration of courage for duty, which is but the prelude to destiny.

Let me ask you to treat Christ at least as well as you treat the world in which you live. Trust Him at least as confidently as you do everything else. You trust the universe—sun, moon, and stars; river, lake, and ocean; cyclone, earthquake, and volcano; fire, flood, and sword; famine and pestilence; friend

and foe; life and death; at least trust Christ as much. Verily, you do trust Him for life and its countless blessings. Stop not with these, but trust Him for what you need more than life and its gifts,—trust Him for the pardon of your sins, for the renewing of your souls by His almighty power, and for the gift of Himself to you for time and eternity.

Let this be my last word: Close for a moment the eye of sense. Veil for a time the eye of the intellect. Press your faces against the face of Christ, and receive the inspiration that comes from contact with Him. Then will the hard places in life become easy, the rough places smooth, the dangerous places secure. You will catch a glimpse of destiny, for you will, without eyes, see Him who is invisible.

OTHER ADDRESSES

COLLEGE ETHICS

PROF. HUXLEY used to say that there might be worlds in which two and two are five. I do not believe the proposition. Nor do you believe it. Nor can you believe it. We can not believe otherwise than that two and two are different from five in all worlds and in all eternities. If, anywhere in time or space, two and two are five, then the five is not our five, or the twos are not our twos. Call the sum what you may—five, four, or zero —Omnipotence can not change the fact that two and two are two and two.

There are some things that are true to-day and false to-morrow. It may be true to-day that the wind blows east, and false to-morrow; but there is some truth that does not depend on which way the wind blows. Down at noon is up at midnight, but there are some things that do not go round with the world. Two and two are four—at noon and at midnight; by the east wind and by the north wind; in the metropolis and in the wilderness; on the solid earth and in the voids of space. We do not need the telescope, microscope, or spectroscope to reveal this truth; for long after the microscope ceases to

subdivide the invisible molecules, or the telescope to break up the irresolvable nebulæ, or the spectroscope to draw its telltale lines, within the within and beyond the beyond, two and two are two and two. The magnificent arch of human knowledge falls in one hopeless mass of ruins when you remove the keystone of necessary truth. Some truth is local and temporal; but other truth is as wide as the universe and as lasting as eternity.

For instance: what is, is; a thing can not *be*, and *not be*, at the same instant; here is not there, and there is not here; now is not then, and then is not now; this is not that, and that is not this,—these are truths that do not rise and fall with the thermometer, point right and left with the weather vane, or move to and fro with the currents of history, whether this history be terrestrial or celestial, temporal or eternal. We can not escape the conclusion—nay, the conviction—that some truth is necessarily the truth, and that necessary truth is eternal. This conviction is the very shadow of our intellectual constitution, and the shadow is as much a fact as the substance.

But what shall we say of that which we sometimes call contingent truth? Given the air, the coal, and a certain temperature, and there will be fire. Given the earth and an unsupported body, and there will be a fall. The truth of the burning coal or the falling stone is contingent. It may be that the coal will burn, and it may be that it will not burn. It

may be that the stone will fall, and it may be that it will not fall. But the contingency of the burning coal or the falling stone depends, not on the law of combustion or gravitation, but on the conditions to which the coal and the stone are subjected. The truth in these cases is contingent, not upon the law, but upon the concurrent circumstances. Under the same conditions, the coal will always burn, and the stone will always fall. The conditions are variable, but the law is unchangeable. When the conditions concur, the coal will burn and the stone will fall, in all parts of the universe and in all stages of its history.

Now, it is convenient to regard all the laws of the universe, material or spiritual, as the expression of God's will. Since God is a Being of infinite perfection, His will is continuous and ever the same. His laws being the manifestation of His will are, therefore, "the same yesterday, to-day, and forever." The contingency of uncertain truth depends, therefore, upon the accident of condition. Given the condition, and contingent truth is as eternal as necessary truth. If the conditions concur, stones will fall and coal will burn, as long as two and two remain four. The will of God is eternal, and is not contingent on the accidents of condition. That necessary truth should be other than it is, is inconceivable; and whether inconceivable or not, it is no less impossible that the will of God should waver. Such is the eternity of truth—of all truth; for at the last, all

truth, whether necessary or contingent, finds its home in the bosom of God.

Such are two of the eternal verities. Two other of the eternal verities are the rightness of right and the wrongness of wrong. Right is right, and wrong is wrong, on both sides of the ocean; at the poles or at the equator; in the open sunlight or in the cavernous darkness; on the moon or on the comets. Right was right when the morning stars sang together; it is right at the present epoch in the march of the eternities; and it will be right when the stars shall cease to shine. The rightness of right antedates all conditions; it overtowers all conditions; it will survive all conditions. The rightness of any particular act is contingent. The rightness of right is eternal.

Moreover, any given act, if right once, will be right forever. By an act, I do not mean merely the visible part of a volition, but the invisible as well. I mean all that constitutes it an act. If right once, it is eternally right; if wrong once, it is eternally wrong. Mark, I now speak of the entire act, and not the overt or visible part. The visible part of an act may be right to-day and wrong to-morrow. For instance: You bind a man hand and foot, and deprive him of his liberty. Is it right or wrong? That depends on whether he has a right to his liberty. If he be a raving maniac, terrorizing the people, it is your duty to bind him, for in that condition he has no right to his liberty. If he be a

peaceable man in the lawful pursuit of his work, it is wrong; for in that case he has a right to his liberty. The one act, which includes both the visible and the invisible part, is eternally wrong; the other, eternally right. Let us not confuse the outward or visible part of the act with the inner or invisible part. The visible part is not the act at all; it is but the sign of the act. The real act is invisible. What I wish to emphasize is, that the rightness or wrongness of a real act is not contingent on time or place. Rightness and wrongness are independent of circumstances and are eternal. The standard by which an act is measured—I mean the real act—is the unchangeable will of God, and an act that once squares to the standard will always square to it, for the standard does not change.

Some things are wrong because they are forbidden; other things are forbidden because they are wrong. It is wrong for a merchant to bring laces into a United States port without paying the duty, simply because it is contrary to law. If there were no law against such free importation, it would not be wrong; just as in the absence of any law to the contrary, it is not wrong to bring in foreign microscopes for scientific purposes without paying a duty. In the one case it is wrong, wholly because it is forbidden by law; in the other case it is not wrong, simply because it is not contrary to law. In either case the outward act, aside from the law concerning it, is a question of expediency and not of ethics; and

its rightness or wrongness depends upon the will of the people concerning it, which, unlike the will of God, is changeable. Such an act may, therefore, be right to-day and wrong to-morrow.

Some things are wrong, then, simply because they are forbidden. Not so with other things. It is wrong to commit deliberate murder. The law of the land says so. That in itself would make it wrong while the law lasts. But if the law were abrogated, murder would still be wrong. Murder—I do not mean what is technically homicide or manslaughter, but real murder—is not a question of expediency, but of ethics. It is not a question of locality; it pertains to the entire universe. It is not a question of any particular time; it belongs to eternity. It was wrong to commit murder before there was any law on the subject. It will be equally wrong after all human laws shall have perished. It was wrong, even before the Divine law concerning it was published. True, it is forbidden among the Ten Commandments. But it is not wrong, simply because it is forbidden; it is forbidden because it is wrong. It was wrong before Mt. Sinai smoked and trembled; and it will be wrong when Mt. Sinai and the earth and the visible universe shall have passed away.

There is such a thing as local etiquette, but there is no such thing as local ethics. What is proper in one place may be improper in another. What is good taste in one community may be poor taste in another. Etiquette is more or less a question of

locality or environment; but ethics knows neither time, place, nor circumstance. What is proper in the court-room may be improper in church, but what is right in one is right in the other.

Expediency may be local; but ethics, never. It may be expedient to erect a water mill by a running stream, rather than on a hilltop; but whether by the stream or on the highland, the mill must grind an honest grist. It may be expedient to erect a wind-mill where the wind blows, rather than where it is always a dead calm, but whether in the wind or in the calm, the miller must not measure ten feet with a nine-foot pole. Expediency changes with the current. It goes north when the current is north, and south when the current is south. But ethics holds steadfastly to its course, whichever way the current flows. Expediency is the gnomon on the revolving earth, which points, now to the zenith, and now to nadir; ethics is the fixed axis of the earth which moves always parallel to itself, and points to the invisible pole of the heavens.

If what I have said be true, then my very theme is a contradiction and an absurdity. College ethics! We do not speak of college axioms, for an axiom is an axiom in college or out of it. We do not speak of the college multiplication table, for five times five are twenty-five in bank as well as in the shades of the academy. We do not speak of college gravitation, for a student falling from the college tower will strike the ground as hard as will the citizen who

falls from the courthouse spire. Gravitation does not inquire whether it is the college tower or the town standpipe. It simply inquires—how high is the fall? And if the distance be 144 feet, it agrees to deliver its passenger to the ground with a velocity of ninety-six feet a second, whether he be student or whether he be citizen.

College ethics? College right angles! College parallel lines! College heat, light, and electricity! The college North Star!!

Why, then, have I selected a theme which carries upon its face its own absurdity?

I have chosen this illogical combination from the fact that there is a sentiment extensively prevalent among our colleges that the combination is not illogical, but that there is such a thing as college ethics differing from the ethics of the counting room, the market place, the street, or the home.

There is a sentiment too largely prevalent that the college man is a law unto himself, and that he can do with impunity what would be disgraceful or even criminal if done by a man who is not so fortunate as to have his name on the college register.

Put in plain English, the sentiment which prevails in many colleges is this: To tell a lie is wrong on the street, but right in college. To cheat is wrong in the market, but right in college. To use personal violence is wrong in a saloon, but right in a college. To destroy property is wrong in a cowboy, but to deface walls or carry off gates and signboards is

right in a college student. To boycott is wrong in Ireland; wrong even in the business circles of the civilized world, but right in a college. To yell and screech on the streets is wrong in a drunken man and should consign him to a diet of bread and water; but to make night hideous with unearthly howls is a sign of culture, provided the howls proceed from the throats of college boys. A street-corner loafer who guys the passerby is rude and insolent, but a crowd of college boys, hooting at the pedestrian that comes their way, are only giving vent to an excess of youthful spirit. To take a barking dog up a man's stairway, through his attic, and leave it upon his roof, half frightened to death, and half frightening to death the immediate neighbors, is wrong in a town boy, but right, even manly and honorable, in a college boy. To violate the Golden Rule is wrong in a heathen, but right in a Christian, provided the Christian happen to have his name on the college roll. The Golden Rule, so beautifully exemplified by the Divine Teacher, is binding on the conscience of the pirate upon the high seas; of the liquor seller, as the young man appears at the bar for his first drink; of the Indian with his uplifted tomahawk; of the gambler in his den of infamy; of the libertine in the presence of his victim;—but forsooth, this same Golden Rule was not made to measure the conscience of a Christian who has matriculated in a Christian college!

Have I put the case too strongly? Let us see.

Street lying is wrong. Equally so is college lying. If a man asks me a proper question to which the answer should be no, and if I say yes in reply, knowing that I should say no, I have told him a falsehood. It is a falsehood in the courtroom, and a falsehood in college. If I say yes to my professor, when I should say no, I tell him a falsehood.

It is useless for me to say that certain college regulations are arbitrary, and that the authorities have no right to demand the discharge of such arbitrary requirements. If I have endeavored to leave the impression that I have done what I have not done, and if I accept the profits of my deception, I have lied. A lie is not complete until one decides to take permanent advantage of the proceeds of the untruth. That is the chief difference between an untruth told in a joke, and a deliberate lie.

Whether, then, the college regulations are arbitrary or not, it is my business to utter the truth. Even though the regulations bind upon my conscience, still it is my part to keep to the truth. I have known students whose consciences were too tender to permit obedience to certain regulations of the college, but which were not tender enough to prevent them from prevaricating about the performance of these so-called unchristian requirements. I do not understand the kind of conscience that shrinks from performing an act, but that does not equally shrink from giving out a false impression concerning its performance. Such a conscience is tender—in spots

—and it selects its own spots. I may protest, even rebel, against the regulations which bind upon my conscience. I may decline to answer all questions relating to either arbitrary or immoral requirements; but if I answer at all, I must abide by the truth. I am willing to defy arbitrary authority, but I will not defy my conscience. I will take the consequences with authority, but I will not take the consequences with my conscience.

I put the question plainly: Have I not described what is, to some extent, the situation? Is it not a deplorable fact that what many students wink at as an innocent sale of the truth in college, they would frown upon as a flagrant breach of the truth on the street?

Again, cheating in the market is wrong. Equally, then, it is wrong in college. You sell your neighbor a horse for a hundred dollars. He gives you ten ten-dollar bills, five of which are counterfeit. When you discover the cheat, you do not rest satisfied until he is lodged behind the prison bars. The college sets before the student ten questions. The student returns ten answers, five of which are genuine, and five counterfeit. Will you tell me the difference between the two cases, aside from the fact that one violates the law of the land and the other does not? Counterfeiting notes was wrong before there was a human law forbidding it, and it will be wrong after all counterfeiting laws have been repealed. Counterfeiting answers to college questions with a pur-

pose of taking permanent advantage of the deceit, would be no more emphatically wrong if the statute books were filled with laws against it, and if the penalty were death itself. Passing counterfeit notes as a joke, with no intention of taking advantage of the act, but with the full purpose of explaining the joke before damage should result, though a violation of human law, may not otherwise be wrong, however improper it may be. Cheating on examination merely as a prank, without the purpose of benefiting by the cheat, and with a full determination to disclose the fact before benefit should ensue, however improper and disrespectful it might be, would not necessarily be wrong. But presenting answers as genuine, which are counterfeit, with the intention of leaving the impression that they are genuine, and with a purpose of taking advantage of the deception, is a flagrant wrong, law or no law, penalty or no penalty.

Again: To combine against a man in business to his disadvantage is boycotting, and meets the unqualified disapproval of all right-minded men; but to combine against a student because he does not happen to belong to a particular set, seems to be easily squared with some standards of college ethics. Such a combination against the individual student may not be formally and purposely entered into, except in rare instances, but if the effect be the same as if a predetermined combination had been devised, what is the difference? A father once wrote to me that

he would send his children to college when they could be as good out of a fraternity as in it, and he was right. Whatever may be the good or the evil of college fraternities, the members should jealously strive to draw no distinctions that will make a student suffer because he sees fit to remain a barbarian.

Again: It is wrong to gamble in a saloon over a game of cards. Everybody says so. But gambling at an intercollegiate oratorical, football, baseball, or rowing contest,—why, what harm can there be in that, provided the gambler be not a town loafer, but a college student who merely wishes to show his confidence in his college team? "It is quite the thing, you know."

Down with the gambler, whether he be libertine or academician! Down with him, whether he breathe the atmosphere of college culture, or the noisome vapors of the slums!

Still further: To pick one's pocket on the street or to break into one's house and despoil him of his treasure, is wrong; but it seems easily squared with some consciences to rob a grave and lay violent hands on the mortal remains of one who during life had been cherished more than silver and gold. It is a crime to plunder a house, but it is simply an outing, a recreation, a professional feat, or at the worst a youthful indiscretion, to plunder a grave, provided the plunderer be a student in a respectable medical college. Woe betide him, if he be an outsider, but

hurrah for him, if he be within the charmed circle of college life!

O, ye blinded youth of our American colleges, the crime of plunder, desecration, and vandalism knows neither latitude nor longitude, neither time nor circumstance, neither student nor civilian, but it is equally black in the eyes of God and all good men, whoever the perpetrator or wherever perpetrated!

Once more: To restrain a man of his liberty without cause, and to add personal violence to this restraint, is wrong, even among savages; but to tie a young man to a bed-post, to shave his head, to hang him until he chokes, to put him in a perspiration and then give him a shower bath of ice-water, to put him in his bed that had been saturated with water, and after all these outrages, to seal his lips with the threat of worse personal violence or even death—this is only a huge joke! Such contemptible and criminal proceeding, it seems, is right or wrong according to the way you spell the word describing it. If we spell it as they do on the streets, m-u-r-d-e-r, it is wrong; but it is all right and a great joke, if we spell it as they do in some colleges, H-A-Z-E.

I do not claim that all these evils exist in all of our colleges. In some of them, these and other evils prevail in even a more marked degree than I have described. In others, they have been reduced to a minimum, and perhaps to some extent have been exterminated. The object of this address has been

to point out the false standards of conduct that so generally prevail among college youth, and to insist that there is but one standard for student and non-student alike.

What is right in college life, is right anywhere, and everywhere. What is wrong everywhere else is wrong in college. The Golden Rule does not bend around a crooked college act. A foot is twelve inches in college and out of it. A pound is sixteen ounces in the store and in the class room. A dollar is a hundred cents on Christmas day, it is a hundred cents on examination day, and it will be a hundred cents on the Judgment Day.

IS IT WISE TO GO TO COLLEGE?

IT depends partly on the college and partly on the one who goes thither. Assuming that the college stands ready to perform its proper function, and that the youth going thither stands ready to permit the college to perform its proper function on him, I have no hesitation in saying that it is eminently wise that our young people should go to college. It is a good thing *to know how.* Young people go to college, in part, for the purpose of "learning how."

An engine in a large manufactory got out of order. The engineer exhausted every expedient within his knowledge to obviate the difficulty; but all to no avail. At last he reported to the proprietor that he could do nothing more. The proprietor of the factory sent for a skilled engineer from a neighboring city and put the case in his hands. The skilled engineer, after surveying the machine with his practiced eye, took a hammer and gave a certain part of the engine a few sharp raps. On turning to go away, he said with assurance, "Now she will go," and according to his prediction, when the fire was kindled, *she went.* In a few days he presented his bill for $25.50. The proprietor of the factory was at first astonished at the magnitude of the charge,

but on looking again, he found the following items: For fixing engine .50; for knowing how, $25.00. Total, $25.50. He paid the bill without a protest.

You fall sick and send for a physician. He comes, looks at your tongue, feels your pulse, takes your temperature, asks you a few questions, leaves some simple directions, and charges you two dollars for his service. He is absent from his office an hour. Ordinary unskilled labor, such as breaking stone, or sawing wood, is worth fifteen cents an hour. Why do you pay the physician the additional $1.85. Simply because "he knows how." You get in trouble and go to a lawyer (or vice-versa, as the case may be). He gives you two hours of time and some valuable advice and charges you twenty dollars. The unskilled part of his service is worth thirty cents. You pay him the remaining $19.70 for "knowing how."

Young people go to college to learn how to do best what God may call them to do.

But after all, is it wise to spend four years in the very strength of early manhood or womanhood in a kind of life that seems not only unproductive, but really very expensive? Many students who are now in college have watched with interest the career of their early companions, who, instead of going with them to college, have plunged at once into the activities of life. These early companions are now well established in business, while those who are yet in college can only look forward to a time when they

will enter on their life work several years behind in the contest. You naturally ask the question, Have these students chosen the wise course? Are not those who plunged at once into their career better off with their certainty on their humble plane, than the college students with their uncertainty on their proposed higher plane? If the student should, after graduation, succeed only as well as his early companion, would he not always be several years behind in the race? If he should have greater success, is it at all probable that he would overtake his old companion with such odds against him?

This discouraging view is not the least of the reasons why the senior class in colleges is only half as large as the freshman class, and why the freshman class is not one-tenth as large as it ought to be. If this discouragement weakens the purpose of those who have almost reached the goal of graduation, how much more dispiriting it is to those who are just entering college, and who must look forward to a time, many years hence, when they shall take up the work of life. I am sure that there are many parents and many young people who take this discouraging view of the case, and that this fear on their part keeps thousands of youth out of college who would otherwise be there.

Now, I wish to say that there is no valid ground for such discouragement. On the contrary, there is good ground for commiserating the less fortunate ones who are prematurely in the race.

I.

My first proposition is this:

The four college years, in themselves, and without any reference to the future, are better than the same four years spent in any other way. One young man goes to college and spends $1,000, and earns nothing. Another young man of the same age and capacity devotes the same four years to business and earns $1,000 more than he spends. The second is better off than the first by the number 2,000, if we express the value in dollars, but the first is better off than the second by tens of thousands, if we express the value in opportunity and personal uplift. If we pay no attention to the four years of college life as a preparation for the future, but take this period only for what it is worth in itself, it will more than compensate for all that it costs. College life is not, as many suppose, lost time, which is to be made up by high effort in subsequent years. It is worth on its own account all that it costs in time, effort, and money.

A man grinds his axe for an hour before he goes out to his day's work. The only justification for the grinding is to be found in the subsequent work of the day. The hour's turning of the crank and the hour's bearing down on the stone have no value in themselves. It does not pay the axe to be ground and not used. If, after the last revolution of the stone, the axe falls into the fire, the hour's

labor is not only of no value, but is wasted energy. The wisdom of grinding an axe depends wholly on whether it is to be used or not. But the wisdom of going to college does not depend alone on whether subsequent use be made of the culture.

If the successful student should die on graduation day, unlike the axe which is ground but not used, his college life would justify itself.

There are two considerations, either of which would make true the proposition that a college course pays as it goes.

(1) The first of these considerations is subjective, relating to the student himself, irrespective of his influence on others. If I should appeal to the alumni of our colleges all over the land, they would say that their college life was one of intense personal enjoyment and happiness.

The college world is one peculiar to itself. It is *a* world within *the* world. Although some of its standards are artificial, some of its customs unjustifiable, and some of its ethical codes absurd, it is nevertheless, so far removed from the outer world as to afford an occasion for the exercise of a true unselfishness. In the outer world, every man is primarily for himself as against all others. In the college world, every one is for himself in harmony with all others. The outer world is a contest of men against each other. The fittest survive, the rest go down. The college world is a contest of young people, not against each other, in which the success of one means

the defeat of another; but a combined and common contest against the same obstacles; a contest in which all may succeed, and in which the success of one is applauded by all.

Of course, the outer world is not always selfish, or the college world always unselfish, but such are the respective tendencies of each. Here are two young men entering on a four years' course; the one in a college, the other in a successful business. One does not need to be a prophet to predict which of the two will, other things equal, emerge from his four years' course with his heart more widely open to others. The tendency of success in a contest against others is towards selfishness. The tendency of success in a common contest in conjunction with others against the same difficulties, is towards unselfishness and broad charity; for it is a contest in which all may succeed alike, and in which each one's success is a factor of the success of all.

But the selfish life is the unhappy one, and the unselfish life is the happy one. To the extent, then, that college life encourages the sacrifice of self for the good of others, it is a life of happiness. The tendency of the college is to open the intellect towards all truth; to open the conscience towards all virtue; to open the heart towards all good, and to gird the will for all righteousness. Happy, indeed, is the youth who will let the college work out its tendency in the lengths and breadths and depths of his being.

Besides this, it is well known that the college

originates deep and lasting friendships. College friendships are peculiar to college life. Two young men may, for four years, plow in the same field, clerk in the same store, work at the same bench, or write at the same desk, and twenty years later each may have forgotten the other. But two young men drawn together for four years by the ties of college life will never forget each other. They have sat together on the recitation bench; they have walked together up and down the streets; they have planned together; they have thought together; they have together taken part in innocent pranks; they have shared each other's secrets; they have borne each other's sorrows, and rejoiced in each other's joys; together they have failed, and together they have triumphed. Let them meet forty years after graduation, and the fires of their old love rekindle, and together they live over their college days.

O, the young people of our colleges—these are golden days in the golden years of their lives! Four years of mutual trust, of mutual forbearance, of mutual self-sacrifice, of mutual inspiration from the depths of unselfish friendships—this is worth more than the dollars they will spend for their college course, or than the other dollars they might have earned if they had not gone to college.

But beyond all this, the intellectual achievement of the student brings him a satisfaction worth infinitely more than the money he may have lost by going to college. Next to the delight of conscience

in the presence of duty performed—which is the keenest delight that ever thrills the human soul—is the delight of the intellect in the presence of a newly discovered truth. How our souls have quivered within us for joy, as we have chased truth from its hiding place! How many times, like the favored three of old, have we stood on the mount and said, "It is good to be here," as we looked upon the transfigured glory of a far-reaching and wide-sweeping truth! O, the exquisite delight of the human soul as it stands face to face with the uncovered glory of truth! What is the joy over a sharp bargain you may have driven with your neighbor, compared with the joy of executing your honest bargain with God, by which you give hours of solid toil for glimpses of the uncreated beauty of truth! From the summits of those mounts of transfiguration where Truth has taken on its glorified form, how unworthy has appeared the contest for gold in the valleys below! Not greed of gain, but greed of truth, opens the way to happiness.

It is waste labor to grind the axe unless you use it, for the axe does not know that it is being ground; but it is clear gain to discipline a human being for the future, whether that future come or not, for he knows that he is being disciplined, and he extracts the keenest delight from the discipline.

(2) But there is an objective consideration which equally makes it true, that if the successful student die on the day of his graduation, his college life is

worth its cost. The axe can not chop while it is on the grindstone, but the student can do work for others while he himself is under training.

The opportunity of the student to affect his fellows is unique. He stands at the beginnings of things; and at the beginnings of great things. He stands where a given amount of force will produce the greatest possible effect. A small force under peculiar conditions will produce a greater result than a giant force under other circumstances. A thunderbolt, leaping from cloud to cloud, is not so effective as the insignificant electric spark passing between the poles of an insignificant battery, provided the battery connect with dynamite and the dynamite with Hell Gate. The zephyr is more effective than the cyclone, provided the zephyr fan the windmill, and the cyclone waste its fury on its own gyrations. A pound of steam against a piston is better than a ton of steam dissipated in the open air. A mountain stream on the water-wheel is better than the tides of the oceans lashing themselves into useless foam. It requires a less force to start a palace car on a smooth track than a log-wagon on a corduroy road; and if the palace car is subsequently to be drawn by a locomotive and the log-wagon by oxen, it is not difficult to predict which will outrun the other.

The student stands at the place of advantage. He is the electric spark against the dynamite; the breeze against the windmill; the steam against the piston; the waterfall against the wheel; the shoulder

against the palace car that is afterward to speed over the prairies behind the locomotive. Whatever effect he produces on his fellow-students reappears in the future with multiplied dimensions. Hand a ball to a child, and he will throw it a dozen feet in the air. Let the child keep the ball until he becomes a man, and he will throw it out of sight. It is the same ball, but the height to which it will be thrown finally, depends on whether the boy shall forever remain a boy, or whether he shall finally become a man.

Give of yourself, of your life, of your heart, of your thought, of your ambition—give of your very being to a young man, who, though he may afterward become old in years, will always remain on the plane of his boyhood life, and he will give back to the world no more than you gave him. But give of your innermost soul to a college companion who in the years to come is destined to become a mighty force, and he will give back to the world a hundred fold of what you gave him. The student stands at the place of power. His hand is on the long arm of the lever. A slight pressure here appears yonder as a resistless force. I repeat, if the college student whose heart is right, keeps his fingers on the springs of power during the significant years of his academic life, he may die on the day of his graduation, and yet have accomplished vastly more than the unambitious companion of his youth, who lives threescore years on a plane where high opportunity never comes.

If a plea can be made for college life, in itself, and independent of any subsequent advantage that it may bring, how much stronger the plea when the future is taken into account! It does not pay the axe to be ground, unless it is to be used; but as we have seen, it pays the youth to be trained, even for the training's sake. It does pay the axe to be ground, if it is to be used. How much more, then, is college training justified, if the future is to receive the benefit!

II.

My second proposition is this:

It is desirable that young people attend college because of the future towards which they are hastening, both here and hereafter. Even though the years of college discipline, like the hour of the turning grindstone, were of no value in themselves, yet like the axe that is to come from the grindstone to the tree, the student that comes from his college discipline can do more in the remnant of his life than he could possibly have done, if he had plunged unprepared into his work at the time when he entered upon his college career. A sharp axe for nine hours of work is better than a dull axe for ten hours. A vigorous center of force for thirty years is better than a sluggish center for thirty-five years.

Every one owes it, both to himself and others, so to adjust the years of his life as to reach

the utmost limits of his possibilities. Whatever be one's calling, he must live with himself and among others.

He must live with himself. A man is always his own companion. Whether he be a disagreeable or an agreeable companion to himself, will depend on his equipment—physical, mental, and moral.

The man with a sound body, vigorous mind, and pure conscience will always find himself in harmony with God's law in the world, and will consequently always be an agreeable companion to himself.

He must live among others. A man is always a center of force, of greater or less intensity, reaching out to his fellows. The better his equipment, the greater his force; and the more nearly his equipment approximates perfection in body and in spirit, the more nearly will he approximate his possibilities of favorably affecting others.

High equipment, therefore—indeed, the highest equipment possible—is the duty of all men.

At a certain stage of life, which may be called the emancipation era, the Christian college is the best means of creating, conserving, and directing the forces of young people, by which process they achieve the beginnings of this ideal equipment. The college emancipates thought at a time when thought needs emancipation. The Christian college brings thought out into Christian freedom. It makes thought free, but free only for high purposes. The

Christian college, therefore, creates self-determining centers of well-directed force.

If our young people will allow the Christian college to work its proper tendencies in them, they will become fit companions for themselves, now and forever, and will become regenerative forces by which others may attain the highest style of spiritual freedom.

Fitness for living—for living well—for living as well as possible; fitness to become one's own companion as well as the companion of others; the attainment of spiritual freedom and the maximum of rightly directed power, both for one's own sake and the sake of others—these are what the Christian college proposes to help our young people to accomplish.

I have assumed, in urging reasons why our youth should attend college, that they go for the purpose of being educated in the widest and best sense. I have assumed that while they are widening their sails, they are also increasing their ballast; that while they are accelerating the speed of their train, they are also guarding the track on which it runs; that while they are grinding their sword, they are learning to steady their nerves to use it. In other words, I have assumed that their education is to go on symmetrically, and that while they are increasing their intellectual power, they are correspondingly increasing their moral and spiritual power.

Better no sails at all, than wide sails and no

ballast! Better no speed at all, than high speed on a defective track! Better no sword at all, than a sharp sword with untrained nerves!

And I say with tremendous emphasis, better no education at all, than culture of the intellect without culture of the conscience! A conscientious idiot is worth more to the world than an intelligent knave. The conscientious idiot is, at worst, only zero; while the intelligent knave is always a negative quantity, and worse than nothing at all. No one has a right to come purposely into the knowledge of anything which his conscience will permit him to use to the injury of others. He must either bring his conscience out into the light, or he must shut his eyes to the light. He must not see at all, if a perverted moral nature will prompt him to use what he sees in a wrong way.

It were better for our youth to remain in perpetual ignorance, than to go to college to be only half-educated; that is, to be given power, but to cultivate a disposition to use it to the harm of others. The man who deliberately resolves to acquire knowledge, voluntarily assumes a tremendous responsibility. While it is a *great* thing to *know*, it is a *solemn* thing to *know*. While ignorance is a *serious* thing, knowledge is a *more serious* thing.

The only safe education is that which is perfectly rounded; and no education is perfectly rounded in which the will is not brought into harmony with the will of God. While the Christian is not neces-

sarily a perfectly educated man, the perfectly educated man is a Christian.

The only complete and safe education is Christian education. No knowledge is complete that is not supplemented by the knowledge of the Great Teacher, and no power is safe that is not reinforced by the power of the Gospel.

THE WARRANT OF FAITH

And if Christ be not raised, your faith is vain; ye are yet in your sins.—St. Paul.

I AM going to give you my chief reason for believing that Christ arose from the dead. The supreme miracle of the Gospel is the resurrection of Christ. The supreme miracle of history is Christ Himself. Given the resurrection of Christ: then the supernatural elements of His birth, life, and death, with all the recorded miracles, become possible. Given the standing miracle of Christ in history, and the resurrection is equally possible. If the historic Christ is a fact, and none can doubt it who open their eyes on the world, then all the miracles of the Gospel are only incidental to the culminating miracle of His reign in the world. The supernatural birth of the Infant of the manger is not unscientific, if the spiritual birth of 3,000 souls on the Day of Pentecost is a fact. The miraculous life of thirty-three years in Palestine is not unscientific, if His persistent life through sixty generations of the rise and fall of nations is a fact.

Theologians have been going backward at the argument for miracles. The method has been this:

If miracles are facts, Christianity is a Divine scheme; and they have, therefore, endeavored to prove the fact of miracles. The real argument is this: If Christianity is a fact, miracles are possible, for Christianity itself is the most stupendous miracle. Now, that is precisely the argument of St. Paul in my text:—"If Christ be not raised, your faith is vain;" but your faith is not vain, for that is a fact of your own consciousness. Therefore, "Christ is risen from the dead." Or, "If Christ be not raised, ye are yet in your sins;" but ye are not in your sins, for that is a fact of your own consciousness. Therefore, "Christ is risen from the dead."

That is to say, St. Paul does not reason *from* the resurrection of Christ *to* the fact of Christianity, but *from* the fact of Christianity *to* the resurrection of Christ. Theology has argued, "If Christ rose from the dead, Christianity is a Divine scheme." St. Paul argues, "If the Christian scheme is a fact, then Christ must have risen from the dead." That is, theology has, in part, based the warrant of Christianity on the fact of miracle. St. Paul bases the warrant of miracle on the fact of Christianity.

From the time of Christ down almost to the present day, the chief warrant of the divinity of Christianity has been the fact of miracle. But modern science has been pressing upon us this startling question: "What is the warrant of belief in miracle?"

If a new revelation of God were to be made to

men in this day, we should not expect it to be attested by a physical miracle. So far as we can judge, the Red Sea has divided for the last time. No Elijah will meet the prophets of Baal in the twentieth century with fire from heaven. If Christ should return in the flesh, He would not change water into wine; the leper must be healed by the physician or remain uncured; the multitudes must earn their bread or go hungry; the blind must remain blind, and the deaf remain deaf; and the dead body of a Lazarus must wait for the general resurrection. The day of the physical miracle has passed, not because the physical miracle is no longer possible, but because the better day of spiritual truth has dawned upon the world.

At the time of Christ and for centuries before and after, it was easier to believe a physical miracle than to believe a great spiritual truth. We have reached an advanced age when it is easier to believe a great spiritual truth than to believe a physical miracle. Down through the centuries the warrant of belief in Christianity was the fact of miracle. To-day the warrant of belief in miracle is the fact of Christianity. The central miracle of the Gospel was the resurrection of Christ. If that unique and stupendous miracle could be true, the minor ones could easily stand. The immediate disciples of Christ, and perhaps many of His followers to this day, believed in Him because they believed His resurrection and the train of minor miracles that

went with it. The time has come when the ground of belief is reversed, and we admit the truth of the resurrection because we believe in Christ. They believed Christ because of the miracle. We believe the miracle because of Christ.

For my part, I will not believe any alleged miracle, unless, in so refusing, I am forced to believe an equal or a greater one. In other words, I will not accept a miracle unless I must in the nature of the case choose between miracles. If you tell me that a child by a direct effort threw a heavy stone a mile upward in the air, I shall find myself unable to believe it. But if, in the nature of the case, I must either believe your statement or else believe that the stone flew a mile in the air without any projecting force whatever, then I will accept your statement as being the more nearly reasonable of the two. If you tell me that you saw water turned into wine at a man's word, I can not believe you. But if I am compelled to believe either that your statement is true, or that the wine at a man's word came from nothing, then I will believe you. If I must choose between miracles, then I will take that which seems the least miraculous. If I must choose between what seem impossibilities, I will take the one which lies nearest my conception of possibility.

I do not by this mean to say that there are no circumstances under which I would believe a miracle to-day. I do not mean to say that there is no evidence sufficient to establish the fact of a miracle in

this age. What I mean to say is, that the evidence in order to be sufficient should itself seem miraculous on the hypothesis that the alleged miracle was not real. What I mean to say is, that I will not believe anything to be miraculous, whether it is alleged to have occurred in either ancient or modern times, unless, on the supposition of its non-reality, the evidence would be at least as miraculous as the alleged miracle itself. That is, if, on the supposition that the alleged miracle is not real, the evidence in its favor can not be accounted for except on miraculous grounds, then I may accept the alleged miracle as a fact. In this case I simply choose between miracles; or it may be, if I must admit the truth of one, I may equally admit the truth of both. That is, not only may the alleged miracle be real, but the evidence itself may also be miraculous, and even be a part of the miracle which it is designed to establish.

*If it were currently reported that a man had died in our community on Friday last; a man well known to some of our citizens, and in a general way known to many others; if it were attested by a reputable physician that he was really dead; if it were attested further by a reputable undertaker that he had, on Friday evening conveyed the remains of the deceased man to the cemetery and had deposited them securely in the vault; if the sexton of the cemetery testified that the door of the vault had

* Lectures on *Miracles*, by Bishop Edward Thomson, in "The Ingham Lectures," p. 163.

been locked in the usual way; if it were attested still further that some enemies of the deceased man, desirous of preventing his friends from removing the remains from their depository, had stationed an armed guard of four men, whose lives depended on their vigilance, to keep watch at the door of the charnel house; if, still further, these four men testified that at daybreak this morning the door of the vault swung wide open apparently by invisible hands, and that the man who had been dead walked out into the open air and disappeared from their sight; if subsequent explorers testified that they had visited the vault at various times during to-day and had found it empty; if other and reliable persons testified that they had during the day seen, spoken to, and touched the man who had been dead, and that he is now abroad in our community—if all this were the current report through our city to-day, and if these purported to be all the facts, I for one would not believe the report.

And yet, in declining to believe the account, I would not necessarily impeach the honesty or general credibility of the witnesses. I might merely be compelled to think that some one or more of the witnesses had stated as a fact, what he supposed to be a fact, but what was in reality not the fact. The physician might have thought the man to be dead, while he was yet alive. The undertaker might have supposed he was carrying the remains of a certain man, when in fact, he was carrying those of another.

The sexton might have thought he locked the door of the vault, when in fact he had not done so. And thus, within certain limits I might go through the testimony of all the witnesses. You and I have known men to be mistaken (leaving out all intimation of fraud), when they seemed to have as good grounds for their belief as those just indicated. I should, therefore, be compelled to hold that it was more likely that there had been a mistake somewhere in the line of this evidence, than that a dead man had come to life this morning. I could not believe the report, without believing that a miracle had been wrought to-day, and I am unwilling to believe a miracle unless by my very act of doubting, I thereby believe something else that is equally or more a miracle.

Do I, then, deny the resurrection of Christ? On the contrary, I affirm it with tremendous emphasis. If there is one fact in history that I believe without reserve, it is the fact that Jesus Christ rose from the dead. I believe it for the very reason that I should disbelieve that the dead man of last Friday is a living man of to-day. In this latter case, it is to me less a miracle that a dozen witnesses were mistaken in saying that a dead man had come to life than that he was dead and is now alive. That is why I would disbelieve the report. But it is infinitely more a miracle to me that Christ should not have risen than that He did rise from the dead. That is why I believe in His resurrection.

If the bare facts of the death, burial, and resur-

rection of Christ were recorded by apparently candid witnesses of Confucius, Mohammed, or Swedenborg, I should not believe the testimony. It would be more of a miracle to me that they should rise from the dead than that the witnesses of their alleged resurrection should be mistaken. This is why I would not believe of them what I do of Christ. Certain miracles are alleged to have taken place in the history of the Roman Catholic Church. I do not believe that any such miracles occurred. Under the circumstances, I can not believe it. It would seem to me less miraculous that the narrators should have been mistaken than that the alleged miracles should have occurred. And this is why I do not believe these miraculous accounts.

Certain persons, in these modern days, aver that they have witnessed the miraculous restoration to health of those who were incurably diseased. I do not, and under the circumstances can not, believe that any such miraculous restoration has occurred during recent times. It is easier to believe that the witnesses are misguided than that their miraculous stories are true. And this is why I do not believe the alleged miracles of these modern witnesses.

Let us, then, return to the case of the man reported dead last Friday and reported alive to-day. I would not believe the story, because, in the light of all known facts, its falsity would be less a miracle than its truth.

But suppose we have not yet all the elements

of the case. Suppose the world had been looking for this man—expecting him to come on a great mission, to the success of which, his death and resurrection were necessary; suppose several hundred years ago his coming had been pre-announced by men claiming to be endowed with a limited power of seeing into the future and having substantiated the justness of their prophetic claims by other and independent acts of prescience; suppose the exact place of his birth had been fixed,—the country, province, and town; suppose the approximate time (the exact time, indeed, so far as the methods of reckoning time were exact) had been indicated; suppose his name had been given and the family from which he would spring; suppose the most remarkable circumstances attending his birth had been previously described, and the leading facts of his life had been foretold; suppose the circumstances and manner of his death had been described, and that it had been claimed that he would rise from the dead; suppose all these things and many others had been foretold at various times in the past, and that they had come to pass as had been foretold; suppose that he was born at the time, place, and in the manner described; that his life corresponded to the pre-description; that his death was of the kind foretold; that his alleged resurrection, so far as previously described, occurred according to the prophecy; suppose that during his life he had claimed miraculous power and had performed many acts that seemed miraculous; suppose that he

had foretold his own death with remarkable minuteness in the details and in the antecedent circumstances; suppose that he had said how long he would remain in the grave, and had definitely stated that he would rise from the dead; suppose, still further, that during his life he had been distinguished for the purity of his character; that friend or foe had been unable to find in him a single fault; that his life was so far above the purest and best of earth, as to be absolutely unique and to compel the conviction that it was superhuman; suppose he himself postulated the possibility and the fact of his resurrection on the purity of his life; suppose his entire career was inexorably at war with falsehood, and the success of his career depended on his own absolute truthfulness, and yet before his alleged resurrection that he had said it would come to pass, and after his alleged resurrection he positively averred that it had come to pass; suppose, still further, he had declared that his life, death, and resurrection were for the purpose of accomplishing a great mission, and that both before and after his alleged resurrection, he postulated the success of his mission through all the future on the fact of his actual resurrection; and suppose, for the time being, that we ourselves are endowed with prescience, and that we look out along the centuries to come, to see the result of his mission and the justification of his claim; suppose that at the end of one hundred years we find the effect of his teaching to be such that five hundred

thousand men believe in his resurrection; in five hundred years, twenty-five millions; in one thousand years, fifty millions; in fifteen hundred years, one hundred millions, and in one thousand nine hundred years, four hundred and forty million men believe in his resurrection and in his greater power to raise men from spiritual death to spiritual life; suppose during all these nineteen hundred years of the future into which we have looked, we find him helping men and lifting up the race with a power hitherto unknown and unimagined; suppose all these things and much more of the same tenor; now if, in addition to the current report that a man had died last Friday and that he had risen from the dead this morning, all these antecedent, concurrent, and subsequent facts were in substance established, then I, for one, should believe the report. I must admit a miracle greater than the resurrection itself, if I deny the resurrection in the face of these facts.

Mind is no less subject to law than matter, and its law is no less inexorable. If, when the laws of matter seem to turn upon themselves, as in the resurrection of a dead body, we call it a miracle, no less do we call it a miracle when the laws of mind turn back upon themselves, and judgment refuses to judge, and reason refuses to be reasonable; when certainty becomes doubt, and doubt becomes certainty. In view of the evidence of Christ's resurrection I must, in accordance with all the known laws of mind, believe it, or else admit a miracle in the

realm of mind infinitely greater than the miracle of the resurrection; that is, I must admit a contradiction. It is a law of mind that it must believe in the presence of evidence. If it refuse, it breaks its own law, and its very intuitions are contradictory.

Here, then, is my dilemma: In view of the facts just admitted, either the intuitions of the mind are unreliable and contradictory, or a physical miracle has occurred. I must choose one or the other alternative. If I deny the miracle, I impeach the laws of mind; that is, I impeach the only witness either in favor of the miracle or against it. If the miracle has not occurred, the laws of mind are not to be relied on; but if the laws of mind are not to be relied on, how, then, can the mind assert that a miracle has not occurred? If, then, I am to choose between a revulsion in the laws of matter and a contradiction in the laws of mind, I will take the former. Indeed, the only choice that can be valid is that which recognizes the reliability of the mind which makes the choice. I *must* choose between a miracle in the realm of matter and an absurdity in the realm of mind; and when I must choose between a miracle and an absurdity, I will take the miracle.

The physical miracle was necessary in the time of Christ. It is not necessary now. I do not speak lightly of the use of the miracle. It was not only legitimate, but it was imperative. The spiritual miracle of regeneration and sanctification did not appeal to the undeveloped spiritual nature of the men

who lived when Christ came. Their natural eyes could see the multiplying loaves of bread, but their spiritual eyes could get no focus on the "bread which cometh down from heaven." Their physical fingers could touch the living body of Lazarus who had been dead, but their spiritual fingers were too benumbed to recognize a living soul that had sprung from death at the Divine command. Their natural ears could hear the roar of the waves and discern the calm that followed the words, "Peace, be still," but their spiritual ears could neither hear the surging of the waves of sin, nor discern the quiet that follows the diviner command, "Thy sins be forgiven thee."

The spiritual miracle was on too high a plane for them. The physical miracle came down to their level. It was the best way of attracting their attention to immaterial things. But during the centuries of Christ's reign on earth, the spiritual eye has become accustomed to spiritual light, the spiritual ear has become attuned to spiritual sound, and the touch of the soul has become sensitive to that which is intangible to the natural fingers. We have, therefore, come to a time when the spiritual miracle is more authoritative than the physical one. It seems to us greater that the current of a human life should be reversed by the Divine word than that the current of the River Jordan should, by the same Divine voice, flow backwards against gravitation. Not only does it seem a greater thing, but in view of the development of men along spiritual lines since the time of

Christ, it an easier thing to believe. We are accustomed to see the reversal in the tides of a man's life, and are, consequently, more easily able to believe it than to believe the reversal in the tides of the ocean, a phenomenon that we have never observed, and which we do not expect to occur.

The warrant of faith to-day is not the fact of physical miracle. That was its warrant, until men could find a better one. The warrant of faith to-day is the fact of spiritual miracle. The warrant of faith to-day is the historic Christ Himself; not so much the Christ that rose from the dead and ascended on high to the astonishment of a curious and gaping multitude, but rather the Christ who came back from heaven after His triumphal ascension to live in human hearts and to reign in human lives. The Christ of history is the warrant of faith. The Christ that forgives sin, that can and will, if you let Him, forgive your sin this moment—He is the warrant of faith. The Christ that is now bearing the burdens of millions of earth's suffering but trusting ones—He is the warrant of faith. The Christ that takes out your selfishness and hides Himself within you—the Christ that wakes your aspirations for immortality and points you to your destiny in the bosom of God—He is, Himself, the unimpeachable and eternal warrant of faith.

I glory in the physical miracles of the Gospel; I glory in the miraculous incarnation of Christ; I glory in the walking and leaping of lame men, and

in the restored sight of blind men, and in the multiplication of loaves and fishes for hungry men, and in the restoration to life of dead men; I glory in the empty tomb of Joseph, and in the earthquake on Calvary, and in the cloud-chariot that went up from the Mount of Olivet—but infinitely more, I glory in the Christ who has come down through the centuries, the hope of the despairing, the joy of the sorrowing, the comfort of the suffering, and the Almighty Savior of the sinning.

That is why I believe the resurrection of Jesus Christ. I do not believe the resurrection, merely because certain credible witnesses say that He died and rose again; on the contrary, I believe the witnesses because I believe the resurrection, and I believe the resurrection because I believe in Christ. The testimony is valuable, corroborative proof; but as for me, I should believe that Christ rose from the dead if the fact of His resurrection had not been recorded or seen by a single witness. I would believe it, because Christ, whom history has demonstrated to be truth itself, said that He would rise, said that He did rise, based the success of His mission on the truth of His declarations, and has warranted His declarations by the heavenward lift that He has given to the world.

I thank God for a risen Christ, a living Christ, a present Christ. Bury Christ? Where will you bury Him? Where will you find the spot for His

grave? The universe is His, for He made it. He knows every atom of it. He controls every atom in it.

Will you bury Him in the earth? He is already there, marshaling the atoms in their ceaseless vibrations.

Will you bury Him in the sea? He is already there, lifting the waves on high.

Will you hide Him under the mountain glacier? He is already there, for He came down with every snowflake that fell from the sky.

Will you bury Him in the depths of space? He is in every sunbeam that searches out the hiding places of the boundless voids.

There are some things you can bury. Hide a rock down deep in the earth, and it will remain there unmoved and unmoving for millenniums. But hide a grain of corn in the warm earth when spring returns, and look for it again when autumn comes. Lo, it has risen from its tomb, and reappeared a thousand fold on the golden ear.

There is one place where you can bury Christ: Bury Him in your heart, and He will spring to life within you and raise you into a life that shall never end.

THE HUMAN LOCK AND THE GOSPEL KEY

Heaven and earth shall pass away, but My words shall not pass away.—Matt. xxiv, 35.

"*And it shall come to pass in the last days, that the mountain of the Lord's house shall be established in the top of the mountains, and shall be exalted above the hills; and all nations shall flow unto it.*"—Isaiah ii, 2.

IF the enemies of the cross had been true prophets, Christianity would now be only a reminiscence. Less than a century and a half ago, Voltaire gave Christianity only forty more years in which to disappear from the world. Voltaire has disappeared, but Christianity is still here; and during the century in which it was to vanish, it more than doubled its forces, and struck deeper than ever its grappling hooks into the earth. You would tear up many a foundation if you should loosen the grip which Christianity has taken upon the world since Voltaire's death.

Voltaire was a man of no mean attainments in the astronomy of his day, and if he had calculated an eclipse of the sun to occur forty years after

the prediction, the world would have looked with reasonable expectation for its coming. But when he undertook to calculate an eclipse of the Sun of Righteousness, he made a mistake somewhere in his figures.

The astronomer can tell you approximately when the sun, by the process of cooling, will become a black and frozen globe; but it would not be safe to set a time for the extinction of the fires of the Sun of Righteousness—that Luminary that is growing brighter and more glorious to the eyes of men as the centuries go by.

When it comes to the comparison of claims as a prophet, Isaiah seems to have the advantage over Voltaire. Voltaire prophesies: "The house of the Lord in another half century shall be blown from its foundations by the storms of skepticism." Isaiah sings: "It shall come to pass, not only at the end of Voltaire's century, but at the end of time, in the very last days, after atheism, deism, and agnosticism have become only a memory among men, that the mountain of the house of the Lord shall be established in the top of the mountains, where all the earth may behold its glory."

Voltaire may have known more astronomy than Isaiah, but up to the present time the son of Amoz seems to be a better prophet than the eminent French deist.

Still, after all, may not Voltaire's mistake have been in setting the date for the disappearance of

Christianity a little too near in the future? Although he got the wrong answer to his problem of the eclipse, may not the error have been simply that the result—forty years—was too small; and may not the time yet come in which the predicted eclipse will occur? After all, may not Isaiah be wrong and Voltaire right? After all, may not Christianity, like the other great religions of the world, finally become a thing of the past?

Three thousand years ago, or more, Zoroaster founded the religion of Persia. The Zend-Avesta was the sacred book of the Persians. It was their bible. It took hold of their conscience and molded their life. The swarming millions of that ancient monarchy revered Zoroaster and followed his teachings. But where is the Zend-Avesta to-day? Who sings the praises of Zoroaster? What nation perpetuates the hoary religion of Persia? True, a small sect of Parsees in Asia profess at this day to be followers of Zoroaster, but his system has no hold upon the world. The Zend-Avesta is obsolete. The name of Zoroaster awakens no enthusiasm in the twentieth century, and the religion of one of the mightiest nations the world ever saw is buried in the deep grave of the past.

Is this to be the fate of Christianity? Will the name of Jesus Christ be forgotten like the name of Zoroaster? Will the glory of the Christian religion fade in the splendor of future ages as the

glory of the Zend-Avesta has faded in the splendor of the present age?

Five thousand years ago, and how much more no man knows, the countless masses of human beings that blackened the shores of the River Nile had their gods, their religion, and their worship. Egypt of old, whose birth was almost coeval with the birth of the race, had a system of religion that flourished through centuries of national prosperity. Her temples were filled with devout worshipers. Her feast days, of which she had more than any other nation, were celebrated with pomp and ceremonies. On some of these days more than a half million people darkened the waters of the Nile as they sailed to and fro to the sound of music. King after king and dynasty after dynasty bowed before the Egyptian gods, and for unnumbered centuries the religion of the Nile marched forward with conquering step. But who hears to-day the triumphal march of the gods of Egypt? Who falls down in reverence before Isis and Osiris? The Nile still flows to the sea; the pyramids still point to the sky; but the gods of Egypt are as dead as its ghastly mummies. The religion of ancient Egypt is as breathless as its great Sphinx.

Is this what the future will write of Christianity? Will the generations to come hear of Jesus Christ only through the dim hieroglyphics on some weather-beaten monument?

Brahmanism, Buddhism, and Confucianism have

held their sway for more than two thousand years in the populous countries of the East. They are all older than Christianity in its visible establishment. Who can estimate the number of human beings whose lives have been directed by these three great systems? But the fate of these religions is sealed. Their progress is arrested. They have reached and passed the zenith of their course. It requires no keen insight into the future to see that Christianity and modern civilization will disintegrate these ancient civilizations and drive out these ancient superstitions. The religions of Asia are doomed. In the centuries to come Jesus Christ will take the place of Confucius and Buddha, and the Gospel will supplant the Vedas. No thoughtful person, however skeptical, can deny that this is the tendency, and that it is likely to be realized. But what of the future beyond the future?

Will Christianity, like Buddhism, become effete? Will the Bible, like the Vedas, be outgrown? Will Christ, like Confucius, be regarded as a remarkable personage for the age in which He taught, but not equal to the civilization and culture of the later ages? And will some new religion or advanced philosophy swallow up Christianity, as Christianity shall have swallowed up the present religions of the world? Will some teacher arise to point out the errors of Him who, up to this time, spake as never man spake? Is Christianity to be the religion of a part of the

race for a limited time; or is it to be the religion of all men for all time?

Is Christianity *one* of the great religions of the world, or is it the *one* religion which shall prove itself equal to the highest culture and the deepest wants of the remote generations to come? For nineteen hundred years it has been the teacher of the world; will the time ever come when it shall be the pupil, sitting at the feet of a future philosophy, science, or culture?

Let us look at the indications.

There are three kinds of fitness: that which is altogether accidental; that which is partly accidental and partly intended; and that which is wholly intended.

These spectacles are adapted to hang on this button. The button is adapted to support the spectacles. But neither the spectacles were made for the button, nor the button for the spectacles. The optician was not thinking with the tailor when he made the frame, nor was the tailor thinking with the optician when he sewed the button in its place. The fitness is altogether accidental and is wholly destitute of significance. I merely take advantage of the unintended fitness when I use the button as a support.

The spectacles are adapted to the nose and eyes, and the nose and eyes are adapted to the spectacles. But while the spectacles were made for the eyes and nose, the nose and eyes were not made for the spec-

tacles. The fitness is mutual, but only half of it was intended. The other half is accidental; and in making the spectacles, advantage is taken of the fitness of the nose to support them; and the distance between the lenses is adapted to the distance between the eyes. While the Creator of man was not thinking with the optician when He made the nose and eyes, the optician was thinking of these organs and, therefore, thinking with the Creator when he made his lenses and framework. The only significance of this case is, that both the spectacles and the nose and eyes had makers, but these makers had no necessary connection with each other.

Here is a key, and at my home is a lock. The spindle of the lock fits the bore of the key. The teeth of the lock fit the notches of the key, and the notches of the lock fit the teeth of the key. The fitness in this case is not only mutual, but it is wholly premeditated. The key was made for the lock, and the lock for the key. Each tooth in the lock was made because of the corresponding notch in the key. Each tooth of the key was made because of the corresponding notch in the lock. The spindle of the lock was made for the bore of the key, and the bore of the key was made for the spindle of the lock. The lock and the key are intended to be complementary to each other. The significance of this case is, that both the lock and the key were planned by the same thinker. Where mutual fitness between two parts is wholly premedi-

tated, the designer of both parts is one and the same; or if there be two designers, each plans in harmony with the other.

Now, if it can be shown that a certain religion was made for man, being partly or wholly adapted to his nature, it will signify merely that the author of the religion took advantage of the existing fitness in man's nature, and constructed his religion accordingly; and the author might be a mere man, more or less remarkable, according to the degree of adaptation in his religious system. But if it can be shown that a certain religion was made for man, and that man was made for that religion, each being by premeditation fitted for the other, it will signify that both man and his religion had a common Author.

The facts show that all the great religions of the world were made for man, all of them having some elements adapted, with more or less precision, to some parts of his nature. Incomplete as these religions are, the fact of their partial adaptation to the human soul is a striking evidence of the greatness of their founders. Had this adaptation been complete, meeting every possible attitude of the human heart and intellect in all races and ages, these founders might have justly laid claim to supernatural assistance in the conception and establishment of their religious systems.

But the fitness is only partial. Each religion fits some conditions of humanity, but utterly mis-

fits others. One religion recognizes the body, but ignores the soul. Another recognizes the soul, but ignores God. Another recognizes the present, but ignores the future. Another provides for the future, but not for the present. Some are valuable in joy, but not in sorrow. Some are open to the learned, but not to the ignorant. They are all good in some respects, but bad, even fatally so, in others.

They are all better than no religion. A poor religion is better than none. A poor religion has some binding force on the conscience, while the absence of all religion knows no restraint whatever. A poor religion knows something of duty; non-religion has no such word in its vocabulary. In the name of poor religion many crimes may have been committed; in the name of non-religion all crimes may be committed with impunity. An imperfect religion may throw children into the Ganges; non-religion could plunge the knife into every breast without a shudder. An imperfect religion may keep women in slavery; non-religion could hold its foot on the neck of every human being without a blush of shame or a tinge of remorse.

These human religions, imperfect as they may be, are better than none; but they are incomparably inferior to a religion that would fit all men in all circumstances. They were made for men, it is true; but their authors had not successfully taken the measure of men, and the result in every case was only a partial fitness. They were made for man,

but man was not made for them. The Author of man and the author of these religions were altogether different persons. These religions were made for particular men, and not for humanity; nor did they fully fit even the men for whom they were specially founded.

Confucianism was made for the learned of China. It fits them but imperfectly, and utterly misfits all other races, and all other classes of the Chinese people. Conservatism is its chief characteristic, while progression is the watchword of the nations of the West. It emphasizes the duty of man toward his fellow man, but not towards God. No religion that does not emphasize the existence and authority of God can sound the depths of the human soul.

Brahmanism was made for a section of the human race, and it presents few features that commend themselves to the universal heart of man. It recognizes the future, but ignores the present. It exalts spirit, but degrades the body. No religion can satisfy all the wants of the soul that ignores the stirring activities of the present life, and suspiciously looks on the human body as the great enemy of the soul, which is to be conquered by the cruelties of penance.

The religion of Egypt was made for a fragment of the race, but it fell short, even, of their wants and aspirations. How much more must it fail to satisfy the universal soul of mankind! It exalted the body, but debased the soul. It carefully embalmed the body, and sacredly put it away, but it

sent the soul on a winding tour through the bodies of all animals, forbidding its return to a human form until it had made the complete circuit of animated existence.

Thus I might go through all the great heathen religions of the world. They each have some truth. They each have some adaptation to certain phases of human needs; but they all fail, not only to satisfy universal human nature, but to meet even the ends for which they were expressly designed. Not only is it impossible that any one of them should permanently absorb the rest, but that any one of them should permanently retain its hold upon even those for whom it may have the most marked fitness.

In a word, these religions were made for specific peoples as imperfectly comprehended by their founders; but no one people, much less the entire human family, was made for any one of these religions. The fitness is not mutually premeditated, but is altogether one-sided.

If, now, it should appear that a certain religion was made for man, and at the same time that man was made for this religion, the fitness being mutual and premeditated, then the Author of man and the Author of the religion must be one and the same.

Is this true of Christianity and the nature of man? Does the key of Christianity fit the lock of the human soul? Is there such a remarkable fitness between the Gospel and humanity as to justify the

proposition that the Author of the one is also the Author of the other? Let the facts answer.

There are some questions asked by one race of people not asked by another. There are some wants generated by one climate not found in another. There are some hopes kindled in one age that do not burn in another. But there are some questions, wants, and hopes that belong alike to all races, climates, and ages. Ask the ancient Persian, "What is war?"—talk to him of battles and conquests, and he drops everything to listen. But these questions excite no enthusiasm in the Chinese mind. Talk to Confucius of the past, with its traditions and sacred treasures, and he hears you gladly; but when you come to the Brahman, speak to him of the future, if you would have an attentive hearer. For the Egyptian, nature; for the Greek, beauty; for the Roman, law; for the Mohammedan, fate; for the Anglo-Saxon, independence; but what is your password for humanity?

Strike a key on the piano, and only one string replies; strike a key on the full organ, and a dozen pipes respond in unison. What is the key which, when struck, will meet a response from all races, climates, and ages? What are the questions which will awaken interest in every human soul? What are the needs felt by all men, and the aspirations that kindle in all breasts?

I suppose that two great questions which all the race unites in asking are:

1. What is God?
2. What is man?

If Christianity satisfactorily answers these two questions, the world will never give it up. The non-Christian religions have failed to answer them, and as a result they are either dead or dying. The race will have those questions answered, if an answer is possible. Egypt asked, but no answer came. Persia, India, Greece, Rome, repeated and pressed the significant inquiries, but no response came on which all could unite. Some said, "God is the universe;" others, "The sun is God; the moon and stars are God; beasts and creeping things are God." Some said, "Man is but a clod; or if he has a soul, it is doomed after death to the companionship of reptiles and monsters."

These answers and others like them might temporarily allay the curiosity of the few, but they only roused other and more stubborn questions. The human heart is too deep to be sounded by such plummets as these.

Thus the nations asked these questions, "What is God?" and "What is man?" and thus they failed to receive satisfaction. Judea asked these same questions, and the answer came. I affirm that this answer is satisfactory to the universal heart and reason of man, and upon this truth I affirm that it is God's answer to the questions, and that man will never outgrow it or give it up.

1. What does the Bible say in answer to the question, "What is God?"

The Bible teaches that God is a Spirit; a Person, with intellect and will. Nature teaches the same fact, and many heathen religions dimly present this truth. The idea of the personality of God is faintly perceived, but eagerly grasped by the millions of heathendom. The human soul does not want to be alone in the universe. It is conscious of its own personality, and it longs for an infinite Person in whom it may find an eternal companionship. The suns shine; the planets roll; but if there is no God on the throne but unthinking force, the human soul finds no more companionship in planets and suns than the lonely orphan, coming from his mother's grave, finds in the splendid adornments of his palace home. Reason says, "God must be a Spirit." The Bible says, "God is a Spirit." If man was made for the Christian doctrine of God's spiritual essence, then man and so much of Christianity had the same origin.

The Bible teaches that God is eternal. Reason teaches the same.

The Bible teaches that God created and upholds the universe. This perfectly accords with reason. The manner of its creation and perpetuation, concerning which the Bible is silent or imperfectly understood, may be differently viewed by different men; but the fact of its creation and continuance by a personal Superintendent can not be denied. All men

in all ages were, therefore, made for that much of Christianity which teaches the origin and preservation of the universe.

The Bible teaches the omnipotence, omnipresence, and omniscience of God. This falls at once within the line of reason.

The Bible teaches that God is just. Analogy teaches that God ought to be just. All human experience announces that natural law is executed as certainly as effect follows cause. Modern science, that much-abused and long-suffering handmaid of Christianity, writes justice as its alpha and omega. What is the lifeblood of science but law; stern, irrepealable, all-dominating law? Science says, "Nature is just." Christianity says, "God is just." Man was made to abhor injustice. His soul rises in indignation at any exhibition of unmerited retribution. "What ought to be, ought to be," is written indelibly in his nature. He was made for justice. It fits him. He was, therefore, made for that much of Christianity which emphasizes the justice of God.

The Bible lays great stress on the fact that God is merciful. At this point, many hasten to the conclusion that there is a wide disagreement between the modes of nature and those of God. Nature, they say, knows no mercy. If grim and inexorable law is the method of nature, where, they ask, is there room or occasion for mercy? "Put your finger in the fire," they say, "and you will be burned. Fall over a precipice, and you will be

crushed. Jump into the sea, and you will be drowned. Take poison, and you will die. Nature stretches forth no intervening arm of mercy to shield you from the extreme penalty of its violated law; and consequently nature has nothing in its methods to corroborate the Christian idea of God's mercy."

But is it true that nature is merciless? Is not the very justice of nature a justice of mercy, as the justice of God is a justice of mercy? Does not nature provide for the arrest of its laws with as much care as for their execution? In other words, is not the very execution of its laws often an example of its merciful prevention of the execution of other laws whose consequences would be disastrous? "Take a deadly poison, and you die." Is this true? If nature knows no mercy, it is true; but what is the fact? Is it not equally true that another law of nature may be made to counteract the fatal tendency of the poison? For certain overdoses of poison, nature spontaneously ejects the deadly draught from the stomach without human intervention. For a necessarily fatal dose of poison, nature has in mercy made provision for remedies to be administered by human skill. "Put your hand in the fire, and you will be burned?" Not necessarily. The juggler thrusts his naked hand into melted lead, and takes it out unharmed. The intervention of a thin wall of vapor between the fiery liquid and the hand is an example of mercy in nature whereby the action of destructive laws is arrested.

Without the intervention of antagonizing laws, every law of nature would reach its full consummation; and similarly, without intervention, every spiritual law of God would reach the end toward which it tends. Nature does step in and arrest the progress of many of its laws before they culminate. So the Bible teaches that God intervenes and prevents, though by law itself, the culmination of spiritual law.

Nature avoids disaster by tempering justice with mercy,—mercy itself being a mode of justice. God likewise renders possible the avoidance of spiritual disaster by adding mercy to justice, which so far from being antagonistic to justice, is but an instance of its exercise. That is to say:—God's mercy is as truly according to law as His justice.

Put your hand in the fire, and unless you take advantage of nature's provisions for counteracting the heat, you will be burned. Violate any spiritual law of God, and unless you put yourself in reach of His other counteracting laws of mercy, you will suffer the full penalty without relief.

The Christian doctrine of God's mercy commends itself, therefore, to the experience and reason of mankind. If man was made for the Biblical idea of mercy, then man and that much of the Bible had the same origin.

The Bible teaches that God is love. I am willing to admit the uniqueness of this sentiment. Nature has little or nothing to say concerning it. And

the very fact that nature has failed to tell man of something that his heart longs to know, and that fills him with satisfaction and delight when it is known, is sufficient evidence that it is not a perfect teacher. Nature can teach the intellect, but it does not know the avenues of the heart. The intellect finds God everywhere, from the invisible atom to the rolling spheres; from the microscopic monad to the flaming archangel. Nature knows the language of reason, but the heart speaks in an unknown tongue. Under the tutorship of nature, reason says: "Yonder is my God, riding on the whirlwind, talking in the thunder, flying on the sunbeam, and balancing the worlds in the palms of His hands." But the heart cries out: "Where, O where is my God? My eyes are blind to the noonday sun. My ears are deaf to the roar of the ocean. My fingers are palsied to the touch of gravitation. Where, O where is He who can still this throbbing, and quiet this quivering, and calm this foreboding, and say, 'Peace, peace, be still?'" In answer to these questions not a syllable comes from the cold, dumb lips of nature.

The Christian doctrine of the infinite love of God, found in no other religion, and revealed only in the life and death of Christ, meets a response in every human heart. It is what the world has sought for everywhere, but found nowhere, except on Calvary.

Do you think the world will give it up? Try the experiment. Send the love of God abroad

through all the earth. Let the weary of all lands pillow their heads on the bosom of God's love. Let the timid and the fearful feel the clasp of the arms of God's love. Let the despondent and the sad look out of their darkness at the noontide splendor of God's love. Let the heartbroken and the desolate hear the music of the anthem of God's love. Let the guilty and the conscience-stricken look up from their sin into the compassionate eyes of God's love. And will they let Him go? The human heart was made for God's love. It is empty without it, whatever else it may have. It is full with it, whatever else it may lack. Whoever made the human heart founded that religion whose center and circumference is love.

The answer of Christianity to the universal question, "What is God?" is satisfactory to man, and the Author of mankind must be one and the same with the Author of the Christian religion.

2. The other question propounded by all races in all ages is, "What is man?"

The Bible teaches that man is a spiritual being, born for immortality. I would not ignore the great doctrines of sin and redemption; but the one great question asked by all ages concerning man has been: "Is this life all?" And I wish to see if Christianity has a satisfactory answer to this question. Sin exists: every one knows that. There must be redemption of some kind: no one doubts that. But after redemption, what? After the elevation of the race,

however accomplished, what? After the din of life's battle, what? After the last tear and sigh and pain, what? After the whirl of time, what? Eternity? Yes, every one believes that; but shall I be there? That is the question that has burst from the depths of every human heart. From the very beginning, men have seen the changes of time. They have seen human life begin, continue awhile through struggle and pain, and then, at last go out. Has it gone out forever? That is their trembling question. Has it really gone out, or is it like the stars that

> "Go down
> To rise upon some fairer shore?"

The religion that answers this question to the satisfaction of mankind will, other things equal, be the religion of the race for all time to come. I affirm that Christianity is the only system that has ever fully, consistently, and satisfactorily answered this question.

Materialism says: "Death ends all. It ends hope as well as despair; joy as well as sorrow; smiles as well as tears; virtue as well as vice; love as well as hate. The last pulsation of the heart is the last of man. The glaze of death upon his eyes blinds man forever."

Can you get the race to believe this? Logical or illogical, you can never get the human race to dig its own eternal grave. Man may doubt the future; he may timidly hope for the future; but

he will never hug to his bosom a system that quenches forever the unquenchable flame of love; that strangles hope, and hangs at every human deathbed and over every human grave the black pall of endless nothingness.

Some of the great religions of the world have as little to say of the future as materialism itself. The past with its history, the present with its activities—these are of paramount importance; but let the future take care of itself. The human heart will never permanently anchor itself to such a system.

Still, the greater number of the world's religions have not denied the immortality of the soul. They have not dared to teach it with authority; but they have hoped for it. These systems are better than materialism, which denies the future. They are better than Confucianism, which ignores the future. But the human soul wants to hear of immortality, not as a matter of doubt, not even as a matter of hope, but as a matter of certainty. The human heart wants no interrogation mark after the word *Immortality.* "I deny immortality,"—that is materialism. "I doubt the future,"—that is Confucianism. "I do not know, and I do not care,"—that is agnosticism. "I hope for a destiny,"—that is the higher form of the heathen religions. "I know that my Redeemer liveth, and that He shall stand at the latter day upon the earth: And though after my skin worms destroy this body, yet in my flesh shall I see God:"—that is Christianity. Which

alone of these can satisfy the deepest cravings of the soul?

Man looks into his soul and finds there the prophecy of better things to come. Is his soul a false prophet? That is the trembling question of the race. Is his soul an uncertain, faltering prophet? He finds himself in the midst of a universe of which he sees but an infinitesimal part. Above him are heights, beneath him are depths, and about him are lengths and breadths, upon whose foggy edges he has stood, and into whose infinitudes he has looked, and looked in vain. When his heart shall have ceased to beat, will he have no further insight into these unexplored regions? When his weary body at last lies down to die, just as he has come to the title-page of the book of mystery, will the volume of the universe be abruptly closed in his face forever?

He looks at the present and finds it prophetic of the future. Will that future never come to him? He sees in his present intellect the promise of a future vigor that shall cope with tremendous giants of thought, compared with which his present force is but a pygmy. He reads in his present intellect the promise of a future memory that holds everything it touches; of a future judgment that goes to its goal as straight as the arrow to its mark; of a future imagination that sweeps the dizzy heights with the poise of an eagle in its flight; of a future reason that does not climb to reach the mountain peaks of truth, but which

"Stoops to touch the loftiest thought."

He looks into his heart and finds emotions eloquently predictive of the future. Will that future never come? He finds hope, whose sun has never yet gone down behind the western sky, and which in the future ascends higher and higher towards a zenith that it shall never pass. He finds love, strangely sounding the prelude of a future anthem that shall fill his whole being with ecstasy. He looks at his will, and finds it instinct with a future that knows neither weariness nor flagging. Here his will crosses Alps, but yonder it will take its tireless troops across the untrodden peaks of Himalayas. Here will can tunnel mountains of granite, but yonder it can send its dynamitic engines through leagues of solid steel. Here it wearies, falters, succumbs; but yonder its tireless energies never abate.

Such is the vision of man when he looks down into the depths of his soul. Materialism tells him the vision is false. Agnosticism says it does not know, and it does not care. Heathenism says that such a future perchance may come. Christianity declares it *shall* come. For which of these was he made? Which alone of all can fill him?

Man centers his hope and his love in those around him. That center may be his prattling child, who has come from the unseen world to stand at his knees, to look into his eyes, and to fill his heart. It may be his wife, to whom he is drawn as the needle to the pole. It may be the mother, who always wiped away his tears and took him into her

heart, that was never so full of cares and bitterness and mortification and despair as to leave no room for him. But the circle of his hope and love vanishes before his eyes. The prattling child drops back into the unseen. The wife of his heart falls by the way, and he goes on alone. The grave closes over the mother whose heart always carried him. They are gone, and he is overwhelmed. There is no more beauty in the flowers. There is no more music in the birds. There is no more warmth in the sun. As he turns from the grave of hope and love, he asks in despair, "Is that the end?" "Yes," materialism hisses, "that is all." Agnosticism tauntingly responds, "Who knows, and who cares?" Heathenism falters, "That may not be all." Christianity proclaims, "*That is not all. They are not dead.*"

" There is no death! The stars go down
To rise upon some fairer shore,
And bright in heaven's jeweled crown
They shine for evermore.

There is no death! The leaves may fall,
The flowers may fade and pass away;
They only wait through wintry hours
The coming of the May.

There is no death! An angel form
Walks o'er the earth with silent tread;
He bears our best loved things away,
And then we call them dead.

He leaves our hearts all desolate,
He plucks our fairest, sweetest flowers;
Transplanted into bliss they now
Adorn immortal bowers.

The bird-like voice, whose joyous tones
  Made glad these scenes of sin and strife,
Sings now an everlasting song
  Amid the tree of life.

And where he sees a smile too bright
  Or heart too pure for taint and vice,
He bears it to that world of light,
  To dwell in Paradise.

Born unto that undying life,
  They leave us but to come again;
With joy we welcome them the same,
  Except in sin and pain.

And ever near us, though unseen,
  The dear immortal spirits tread;
For all the boundless universe
  Is Life—there are no dead."

That is the keynote of Christianity. It sounds the anthem of man's future in no minor key. It chants no dirge at the grave. It sings a march—a triumphant march; the march of the soul into a destiny that shall unfold forever; a destiny in which the soul shall have unending triumphs; a destiny in which the intellect, full orbed, shall sweep majestically through the infinite depths of truth; a destiny in which the will shall feel no fetters but the will of God; a destiny in which the heart shall throb forever with the ecstasy of love; a destiny in which the conscience shall thrill eternally with the joys of holiness; a destiny in which the soul shall find possibilities born of possibilities that know no bounds but the infinite.

That is Christianity's answer to the question, "What is man?" and that is the solution that will satisfy the human race from now till the end of time.

The religion of the future will be the religion of Jesus Christ. The religion of the future beyond the future will date from Mt. Calvary. The highest culture of the ages to come may lift its standard to the loftiest height, but far above, in beauty and glory, will be the standard of Christianity. When the moon shall outclimb the sun, then may culture outstrip Christianity. When the moon shall outshine the sun, then may human philosophy shed light on the Cross of Calvary.

Go where you will on earth, and you can not pass beyond your horizon. Go out upon the sea, and wherever you move, your horizon goes with you. Climb a mountain and look down on the landscape at your feet; still you are in the center of your horizon. Let human philosophy move out over seas of progress, or mount to heights of culture; still, it can not pass the horizon that encircles it; for of all true human philosophy, the center is the Cross of Christ.

DID MAN MAKE GOD OR DID GOD MAKE MAN?

YOU can not dispose of God by printing His name with a little g. He came before the printer. God is not determined by the size of His initial letter. He was already in the universe when the alphabet appeared. He is the Alpha of all beginnings and the Omega of all endings. The agnostic philosopher, who supposes that God did not make His appearance until He was summoned by men, is an eternity behind time. Somebody had been thinking in the universe a long while before men began to think. Man himself was a thought before he was a thinker. He was a thought with which the Infinite Thinker had been busying Himself since the time when the universe was young; and he is, and is to be, a thought with which the same Thinker will be concerned after the visible universe shall have become a reminiscence. That philosophy is equally an eternity ahead of time which unthrones Jehovah with a witticism. A pun is mighty, but it is not almighty. It will make men laugh, but it will not transform them into creators of their Creator. Pope uttered a noble sentiment when he said:

"An honest man 's the noblest work of God ;"

but the eloquent orator of modern agnosticism scarcely improved upon it when he said:

"And honest god is the noblest work of man."

You can neither reduce the Creator to the creature by ignoring the rules for capital letters, nor exalt the creature into the Creator by a play of words. Grammatical devices are not logic, and wit is not argument.

"WHICH IS THE MAKER, MAN OR GOD?
WHICH IS THE CREATURE, GOD OR MAN?"

The distinguished agnostic whose philosophy I am to examine in this address says that man is the maker and God is the creature. The Bible says that God is the Maker and man is the creature. The one says that God made men in His image and after His likeness. The other says that men made God in their image and after their likeness. Which is right?

I do not forget that every man has his own ideal of God, which differs with different men, and to that extent that every man makes his own God. So every man makes his own Pyramids of Egypt. But back of his ideal of the Pyramids there is the reality which is the basis of his ideal. And the question now is, whether back of every man's ideal of God there is a real being not made by men, and corresponding in some measure to the conception, or whether the God of the Bible is only a subjective

ideal having no other existence than in the vagaries of men, whether of ancient or modern times.

Let me quickly dispose of some preliminaries.

What I have to say was prepared largely in reply to the criticisms on the God of the Bible by one of the most eloquent orators of modern agnosticism. I did not abuse him while he was living, and I shall not begin, now that he has gone hence. Abuse is not logic. Epithets are not arguments. He has put some fair questions—I will not shrink from saying, some hard questions—to the defenders of the Christian faith. Most of them, I know, are old questions, and have been answered more or less satisfactorily in every generation from time immemorial; yet they are always new and must be answered by every generation yet to come.

It will not answer these questions to call the agnostic a blasphemer. If he is right, he is not a blasphemer; for if there be no God but the gods made by men, there can be no such thing as blasphemy. To answer him by calling him a blasphemer is to beg the question. Fairly show him first to be one if you can, by throwing the light on his philosophy, and you will not need to call him names. His personality, his methods, his spirit, have nothing to do with the matter. Is he right or wrong? That is the question. To call him a bad man is not logic; it is cowardice. Logic is not concerned with the goodness or badness of the man; it is concerned with the validity of his argument. Let him be a

good man; that will not serve as a crutch for his logic, if it be lame. Let him be a bad man; that will not make his logic limp, if it be sound. Let him be the devil himself; it will not answer him to say: "Sir, your questions are impertinent; and besides you are the devil and are not entitled to a reply." That is not the way Jesus met Satan in the wilderness. He met argument with argument. Truth is in a sorry plight, if it must rest on epithets. It is old enough to stand alone. The truth is worth its face, though uttered by the devil; and sophistry does not become logic even in the mouth of a saint. Let us, therefore, not make faces at the agnostic, but honestly, respectfully, and fearlessly examine what he has to say.

Further, the task before me is not self-imposed. I am not vain enough to imagine myself better fitted for the work than the distinguished men of this generation who have preceded me, including eminent clergymen, educators, jurists, and statesmen. On the contrary, I shrink from the responsibility in the consciousness of my inadequacy to meet it. But I come at the bidding of my conscience upon the call of the young men of my country, whose Christian faith has been obscured by the black clouds of doubt. Time and again I have been urged to accept the standing challenge of the modern Giant of Gath, but I could not fight in Saul's armor, and I was not skilled with the sling. Young men have begged me, both for their own sakes and for the

sake of their fellows, to defend the faith against the specific assaults of this brilliant agnostic. I have looked through the well-thumbed books of our libraries, only to find marginal comments, in the handwriting of young men, sympathizing with the agnostic rather than with his critics. The young men need help. If I can help them, I will no longer hold back. I will go out to meet the Philistine, not with sword or staves, nor yet with sling and pebbles, but solely, I believe, with the naked truth of God.

I come, therefore, in the cause of young men whose sky is beclouded with doubt. I desire to help them. I do not come to tell them they are sinners because they are doubters. I do not hope to help them by saying that they have reached the callow stage when they think it is smart to doubt. God knows that some of them would give their right arm or their right eye if they could only get back the sweet faith of their childhood. God forgive the men who unwittingly drive our precious youth deeper into doubt and despair by sneering at their callowness, or by calling in question the sincerity of their doubts. That is not the way Jesus spoke to Thomas. The man who doubts, doubts with the reason which God has given him; and I will insult neither man nor God by sneering at honest doubt.

Still further, I make the admission in advance, that so far as the Bible is a human book, it is liable to human imperfections.

It is printed by uninspired men, and before the invention of printing it was transcribed by uninspired men. It may, therefore, contain some human flaws. It was translated by uninspired men into languages different from those in which it was originally written, and here again is a possibility of human imperfections. Its various parts were gathered together by uninspired men; and though almost superhuman care was taken, the result may have fallen short of perfection. Some things may have crept in that do not belong there, and other things may have been omitted that belong to the text. It was given originally, as Christians claim, to inspired men, who saw the visions of revealed truth through human intellects, and who spoke or wrote the truth as fully as they saw it, and in language as well adapted to the task as their vocabularies could supply. Here again, though the precious truth came directly and supernaturally from divine insight and inspiration, we can not be sure that it has reached us precisely as it left the lips of God; because it must, of necessity, come to us through human media.

Now, turn every light of criticism upon the Bible. Turn on the light of nature; and if science shall discover anything that is contradicted by nature, take it out of the Bible, for God did not put it there. He did not put one thing in nature and another in the Book. But be very sure that what science seems to see is a fact; and then be even

doubly sure that the fact does in reality collide with the Book.

But do not stop with the light of nature. Turn upon the Bible the searchlight of the highest criticism, and if it shall surely appear that there are human errors in the text, eliminate the error and preserve the truth. Some of the inexplicable mysteries of the Bible may lie in the imperfection of the human element, and the elimination of this imperfection may clear away the mystery. But in spite of all its possible imperfections, there is no other standard book of approximately equal age so free from human flaw.

Judge the Bible, not by an occasional inaccuracy or some apparent inconsistencies, but by the general sweep of its teaching. Astronomy tells us that the planets move around the sun from west to east; yet at times they seem to move backward from east to west. But this backward motion is not real; it is the fault of our standpoint of observation. The planets still move onward with steady march. Judge the planetary motion, not by what it seems now and then, but by the stretch of an entire orbit. Judge the current of a river, not by the eddies along the shore, but by the steady onflow of its waters to the sea. The occasional retrograde motion, in the orbit of inspired truth, is only apparent as seen from our eccentric human standpoint; and when the stream of truth seems to flow backward against gravitation,

it is only the eddy near the shore occasioned by some human impediment.

A peach tree does not bear crab apples when a few crab branches have been artificially attached to its trunk. Judge a peach tree by the fruit that grows on its own branches, and not by the withered crabs that hang on a foreign branch. Judge the Bible by its legitimate fruit, and not by the bitter product of an artificial branch, whether attached to the trunk in ancient times by mistake, or in modern times by false interpretation. The Bible has vitality enough to yield its own appropriate fruit, even after the parasites have sated their thirst upon its juices. Judge the Bible, not by the parasites that cling to its branches and suck at its vitality, but by its inmost life that reaches from root to fruit. Many of the seeming contradictions of the Bible will yet disappear in the light of candid criticism.

Moreover, judge the Bible by what it proposes to do, and not by a foreign standard artificially set up. The Bible came to teach men of human duty and human destiny—not to teach science, art, literature, or philosophy. The agnostic claims that God is opposed to art, science, education, and liberty, because forsooth the Bible is not a good text-book in these subjects. On the same ground, the great agnostic himself must have been opposed to the public schools, because there is not a word concerning the subject in his remarks at his brother's grave. He must have been opposed to mathematics, because he

does not call attention to the multiplication table in his lecture on Shakespeare. He must have been opposed to pure love and happy homes, because he does not work a love story into his lecture on Ghosts. Judge a funeral oration by what it says of death and the dead, and not by what it fails to say of educational systems. Judge a lecture on Shakespeare by what it says of Shakespeare, and not by what it fails to say of mathematics. Judge an address on ghosts by what it says of ghosts, and not by what it omits saying of domestic life. Judge the Bible by what it says of duty and destiny, and not by what it fails to say of art, science, letters, and philosophy.

One more preliminary. The specific objections brought by the agnostic against the God of the Bible are numbered by scores, if not by hundreds. It is evident that I can not examine them in detail. I shall, therefore, attempt to gather them all together in a few general classes, and consider the classes rather than the individual objections. Some of his statements are foolish and frivolous. Some are not true; some are overdrawn; some contain half truths or unfair coloring of whole truths, and some are as true as the Gospel. He has said many beautiful things. His philosophy contains much that is helpful and elevating. It could not well be otherwise at those points in which it coincides with the philosophy of Jesus. But credit to whom credit is due. I wish that much of his inspiration concern-

ing justice, humanity, love, and liberty might take posession of the people. I wish that his beautiful pictures of happy homes might in large measure become realities under every roof. And they will, when the philosophy of Jesus Christ shall universally prevail.

I shall not stop to correct his specific misstatements, for they will fall of their own weight, if the heads under which I group his objections can not stand. And now I come to the work before me.

What immediately follows was submitted to the inspection of the eloquent agnostic during his lifetime, lest I might unconsciously have misrepresented him in his charges; but in reply he did not indicate any instance of injustice or misrepresentation in my statement of his criticisms.

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The agnostic claims that the Christian religion and its reputed Author were both man-made, and are, therefore, no better than the men who made them.

He objects to the alleged Author of the Bible on the ground that, like the men who made Him, He is *ignorant, savage, cruel, unjust, immoral, inconsistent, and unfaithful;* and, as I have already intimated, that He is opposed to *art, science, education, progress, and liberty.*

He objects to the Christian system on the broad ground that it is *unscientific*—that is, having been

made by unscientific men, the Christian scheme is *contrary to fact, unnatural, superstitious, and unadapted to the task which it proposes.*

In order to gain time, I will throw all these objections against God and His Book into two general groups, which, I think, will be all inclusive,—viz., *moral objections against His character, and intellectual objections against His revelation.* That is, the agnostic objects to the character of God as set forth in the Scriptures on the ground that it is offensive to the twentieth century conscience, and he objects to His revelation on the ground that it is incompatible with twentieth century intelligence.

I.

First, then, the objection to Jehovah Himself on moral grounds. Here it is in a word: He is *cruel*, for He sent fire, flood, famine, and pestilence to man and beast and left them to perish in horrible tortures; and, moreover, He has made possible a future hell. He is *savage*, for He commanded His agents to give no quarter to prisoners of war. He is *unjust*, for He allowed the innocent to suffer and perish with the guilty. He is *immoral*, for He established and upheld slavery. He is *partial*, for He "killed Uzzah for putting forth his hand to steady the ark," but forgave "David for murdering Uriah." He is *unfaithful*, for He made promises which He did not keep.

I will stop right here long enough to deny specifically this last assertion, and challenge a single clear case in which God failed to meet His part of the contract according to the conditions; and I will stop still further to deny specifically the charge of partiality—namely, that God ever varied His government for different individuals, the circumstances being alike. He is a respecter of conditions, but not of persons.

Such, then, are the charges against the moral character of Jehovah. Therefore, the agnostic claims, the God of the Hebrews is only man-made; He was only a subjective existence in the minds of the men who made Him and who were like Him; and He is only a subjective existence in the minds of the superstitious one-third of mankind, who at present happen to be the most intelligent, enlightened, and civilized people on the globe.

Now, in my first stricture on the charge of God's moral obliquity, I wish to be clearly understood, and not to be held as claiming for it more than is warranted. Let us for the moment assume Jehovah to be a reality. He is, then, by hypothesis, the God of nature as well as of revelation. But nature is not a dead issue. It is a present fact, and has been a fact facing the history of the past; a history accepted by agnostic as well as Christian. What does history say? What does our own observation declare? They declare that nature seems to be *savage*, for it gives no quarter; that it seems to

be *cruel*, for it leaves man and beast to writhe in untold torture from fire, famine, pestilence, and flood; that it seems to be *unjust*, for the innocent suffer with the guilty; that it seems to be *partial*, for it helps the strong and opposes the weak; that it seems to be *unfaithful*, for it kindles hopes which are never realized; that it seems to be *immoral*, for by the law of the survival of the fittest the weak become the slaves of the strong.

Now, I know that it does not answer one question to ask another, and it does not repel one charge to make a counter one. But if the apparent moral obliquity of the God of nature is reconcilable with the moral rectitude which we demand that He must possess, then all similar moral objections to the God of the Bible must disappear. This does not prove the God of the Bible to be a reality, but simply that He is equally possible with the God of nature, and that without moral obliquity. If nature can have a God whose infinite perfection is not irreconcilable with its stern realities, the same is true of the Bible. But nature is a fact; and if it has a governor, his character must be in harmony with his government, however inexplicable and irreconcilable it may appear. Therefore, the God of the Bible may be a fact, and yet be morally upright.

The only value of my argument is this: It does not throw upon the Christian the entire onus of reconciling the facts with the character of God, but throws the onus equally on all who witness the course

of nature. The agnostic as well as the Christian must face the difficulty; and if the agnostic can effect a reconciliation, it is equally a reconciliation for the Christian. If the agnostic is helpless, let him not expect of the Christian what he can not do himself. Let him not demand more of the God of the Bible, if there be one, than he demands of the God of nature, if there be one. Let him not close his eyes on nature, while he opens them on the Bible. Let him not ignore the beam in nature's eye, while he is discovering the mote in the eye of revelation. Either let him join with the Christian in trying to find some common ground of reconciliation, or let him take down his challenge. If neither he nor the Christian can reconcile the apparent moral contradictions, they are both in the same predicament; but the unexplained facts still remain in the one case precisely as in the other. And if nature is, in spite of the apparent contradiction, so may the God of the Hebrews be, in spite of any unanswered questions.

If the agnostic shall answer, "I will not, even for the sake of argument, admit the existence of the God of the Bible or the God of nature," the case is unaltered; for he is still under as great obligation to explain the cruelties and savageries of nature, there being no God, as is the Christian to explain the savageries and cruelties of the Bible, there being a God. If he say, "I can not explain it," then let him take off his hat to the Christian. If he say, "I do not need to explain it," then let him

take back his gauntlet. If he say, "Nature is a great machine that has been grinding from eternity, and will go on grinding to eternity; there is no sentiment in a machine," I throw back into his face the ever-present savageries and cruelties of nature from which he can not escape, sentiment or no sentiment, God or no God; and I demand either a reason or a retreat.

I do not say that this relieves the difficulty; it only makes the agnostic share it. It does not answer the perplexing and unwelcome questions that have come alike to the devout Christian and the honest skeptic, but it puts them both under equal obligation to search for the answer. Nature is, in spite of all contradictions. The God of both nature and the Bible may be, in spite of all irresolvable difficulties.

Let us now squarely face the alleged moral obliquity of Jehovah. I am not here to dodge hard questions; and I freely admit that this question, asked in all ages and by all men, and emphatically renewed by the modern agnostic, is a very hard one. It has been answered time and again, but it will not stay answered. Do what we may, it will spring up before us when we think we have buried it once for all.

The final answer to this question is the answer of faith rather than of sight. Analogy teaches that we must expect unreconciled and apparently irreconcilable contradictions in the government of

God. Such contradictions abound everywhere, from the atom to the universe; and bold beyond expression must be the man who presumes to pass final judgment upon the Infinite God. The agnostic criticises Judge Black for saying that we can not rejudge the justice of God. If Judge Black means that we are not to pass provisional judgments upon the character of God, then I sympathize with the agnostic's criticism. But if he means that we can not pass final judgment on the character of God, he is right in saying that we can not rejudge His justice, even though the visible part of Jehovah's government may seem to contradict His justice.

How utterly preposterous, that the finite should pass final judgment on the infinite, when it sees but one of the countless phases of the infinite! You dare not judge the finite so, much less the infinite.

The man who sees but one thing sees nothing; for he can not tell what his vision is like. The man who knows but one thing knows nothing; for he can not tell what his knowledge is like. You can not fully see a thing until you see how other things appear. You can not fully know a thing until you know its relations to other things. You can not know an atom until you know where it is in the universe, and how it affects and is affected by the rest of the universe. A momentary glance at any phase of history shows nothing. It shows much that misleads, but it reveals nothing which is decisive; for the truth of any moment is projected backward

and forward into other truth. It is a part of the truth from which it springs and equally a part of the truth into which it leads.

I saw a mother force her fever-stricken child into a bath of cold water. He cried with pain, but she was relentless. His teeth chattered, and his frame shook in agony, but she was inexorable. O, cruel mother! Have you no love for your child? Have you no pity? Have you no chord of tenderness that vibrates at his helpless cry? I looked a second time, and lo! the fever had fled, and the child was well again. Was it cruelty that shut the mother's ears against the pleadings of her suffering child, or was it love ? I saw a father take his helpless babe that was choking to death, and deliberately hold its gasping mouth before a hot jet of hissing steam. O, monstrous savage! O, inhuman wretch! Is it not enough that your innocent babe must suffer its own tortures; and must you in its very death struggles add to the horrors of its pain? I listened, and lo! the gasping ceased, the breath of health returned, and the father delivered the smiling babe into its mother's arms. Was it savagery that possessed that father, or was it love?

Now, I say again, a momentary glance at any stage of history is worthless. Take an instantaneous photograph of the world as it is at this moment. What right have you to pass final judgment on such a scene? Cut right through the flow of the world's life, and hold up the cross-section thus made.

What do you see? Absolutely nothing that you can depend upon. A beggar has stolen his way into a royal palace, and at this moment is sitting by stealth upon the throne; but is the beggar a king? The king has disguised himself in rags and is begging at the cathedral door; is the king a beggar? Virtue is in the haunts of vice; has virtue fallen? Vice is seen at holy shrines; has vice reformed? It is the moment when the good man has evil thoughts, and the bad man pure thoughts; the moment when chastity is wrestling with the tempter, and licentiousness is listening to conscience. It is a moment, like all other moments, when some parts of the world are turned upside down and inside out; and the man who judges the world by instantaneous and cross-section views is unworthy of the respect of thinking men. And if you can not conclusively judge the finite by a partial view, how shall you thus judge the infinite?

I say, the final answer to the charge of God's alleged moral hideousness is the answer of faith, rather than of sight. "Shall not the Judge of all the earth do right?" Here we finally leave the difficulty, whatever we may do with it in the meantime; for strange as His ways may appear when we see them with partial vision, we rest confidently in the assurance that a wider vision would make all things plain. He has shown us enough of His love and His infinite perfections in the complete sweep of His progressive revelation, to justify our faith that the

exceptions are only apparent, and that they may be reconcilable in a fuller vision.

Nevertheless, this view should not deter us from making honest attempts to account for the terrible visitations and strange punishments permitted and even ordered by Jehovah in the early history of the race. I will put them in two classes:

1. Those instances in which God made use of *natural agents* for the destruction of the people, such as *the deluge, the rain of fire, the pestilence, and the like.*

2. Those instances in which punishments and death were inflicted through *human agency* by His command.

1. First, then, is God's use of *natural agents* to destroy human life inconsistent with His alleged infinite perfections? I will make short work of this objection. Life is, by hypothesis, the gift of God in trust. It is not an absolute gift, for sooner or later every man must return it. With the exception of those now living, the countless millions of human beings have surrendered that gift, and those now living and those who are yet to live will, in like manner, return the trust of life to the Giver. The most refined ideals of justice demand that a trust once accepted, must be surrendered according to its terms, and that the bestower of such a trust may of right determine the conditions of its bestowal.

But right here my agnostic friend calls me to a halt. He retorts that he never accepted the trust;

that he was not consulted about it; that it was thrust on him without his knowledge or consent, and that it is an injustice to make him a compulsory party to the transaction.

I reply that, whether he was consulted or not, he has most formally and irrevocably accepted the terms of the trust. From the moment he was old enough to think at all about the matter he has tacitly accepted the trust and stoutly claimed all the advantages arising therefrom. Suppose you approach him with doubled fists and say, "My dear sir, I appreciate your embarrassing situation in having the trust of life forced upon you without your knowledge and consent, and I am now going to relieve you of the embarrassment by taking from you the life which you never accepted and which you still refuse to accept." What does he do? He doubles his fists in reply, and proceeds to protect himself against your well-meant endeavors to relieve him from an embarrassing situation which he never accepted. When he falls sick, and the fever begins to foreclose the terms of his unwelcome and unaccepted trust, he sends for the best physician in the town and begs him to prolong the life for which he never asked. He puts a lightning-rod on his house, just as you or I would do; and when the cyclone comes, he takes refuge in the cellar precisely as does the man who has accepted the trust of life. As long as men accept the life that has come to them unsought, as long as they continue to breathe God's air, to eat

God's bread, to delight in God's sunshine, as long as they consent to live on His bounty, human life is a trust as sacred as if it had been originally sought from the hand of God.

This answers, once for all, the objections against the character of God founded on His visitations of *pestilence, fire, and flood.* Death is a law of nature, a law ordained and executed by God, whether it occur on pillows of down or on the wild wastes of the deluge; whether it occur by slow and painful approaches or by the sudden rain of fire from heaven. And God is as much responsible for the ordinary as for the extraordinary death; for the law of death is God's law, and we can not relieve Him of responsibility by placing the law between Him and the death bed. If He made the law, He is directly responsible for its action; as much so as if by an immediate and direct exercise of His omnipotence He should stretch forth His arm in every case.

It avails nothing to say that much of the death in the floods and pestilences was premature. Who is to determine whether any death is premature, the Giver of life or the receiver? "But innocent babes went down under the waters." Do not innocent babes in vastly greater numbers go down under the fires of fever? If death be premature when it occurs before life has reached its maximum vigor, then nearly all the death in the world is premature. Charge not this prematureness upon the extraordinary visitations of God, but upon His ordinary plan.

Indeed, if justification be needed, we can more easily justify His extraordinary than His ordinary proceeding. For in nearly every case, the extraordinary visitation came after due warning, and might have been prevented by the victims themselves. Nothing, therefore, remains of the objections to God's extraordinary visitations of *pestilence, fire, storm, and flood.*

2. But, further, what of the *savageries of war carried on by men under His sanction and command;* or the cases of *individual destruction of life and deprivation of property and liberty by human agency* under His direct order? What of the wholesale slaughter of prisoners, including not only able-bodied soldiers, but helpless old men and women and harmless, innocent children? What of the forcible expulsion of the Canaanites and the seizure of their lands and products without returning an equivalent? What of the reduction to abject slavery of those who escaped death? In a word, what of that long series of acts committed by Israel under direct Divine command—acts which men dare not commit against their fellows without being guilty of oppression, robbery, and murder.

The only new element in this case, compared with the case of fire, flood, pestilence, and the like, is the reflex influence on the men who acted as the agents of God in the infliction of pain, the confiscation of property, and the destruction of life. Here is the criticism in this case: Will it tend to increase

their respect for the rights of their fellows, whether in life or property, to despoil them of these rights continually; and will it serve to make them more law-abiding by constantly violating their own laws in their dealings with others? This reflex effect on Israel and other observers is the only new item in the case.

For, life being a trust, all its content is equally a trust, including possessions of all kinds. A man has a right to that which he holds in trust—a right against all comers, except against those under whom he holds the trust. He has a right to his life against the attacks of his fellow-men. He has a right to his property against the robbery of his fellows. He has a right to the fruits of his labor against the oppression of slavery by a human master. All these rights are inalienable against the approaches of his fellow-men; but they are not inalienable against the Giver or givers of the trust. A deed to a farm makes a man impregnable against his fellow, but not against God, who permits him to hold the farm in trust. The evidence that any product is the work of one's own hand is sufficient against all claims by his fellow-man, but it is of no avail against the claim of God, who gave him in trust the power of producing. The possession of life is sacred against the plans of one's fellow-man, but not so against the plans of Him who bestowed the life in trust.

Society may for its own protection deprive a man

of these rights, each and all, when the exercise of the right becomes destructive of society itself. Society may deprive him of life, if its own existence demand it. It may confiscate his property in self-defense. It may take away his liberty to preserve its own. Society accomplishes these ends through its authorized agents, who are in no manner responsible for the deed. The deed is that of society, and not of the agent. Neither the judge who pronounces sentence of death, nor the executioner who touches the electric button is a murderer; the warden of the prison is not a taskmaster, and the sheriff who seizes the debtor's property is not a highway robber. Society authorizes these agents to act in its behalf, and the real actor is society itself.

Now, if society can delegate to its officers the power to deprive citizens of what would otherwise have been their rights, shall not the Maker of heaven and earth be permitted to do the same? If society can determine what method of capital punishment shall prevail—whether the offender shall be hung, shot, decapitated, or swiftly dispatched by the electric shock—shall not the Almighty determine His method of execution, whether by natural agencies or by human agents?

I repeat, then, the only new element in the case of human instrumentality, as compared with the instrumentality of flood, fire, and storm, is the effect of the method on the human agents themselves. They were the officers of God, as much as the ex-

ecutioner is the officer of society, and they acted under His order. If they had acted on their own authority, they would have been tyrants, oppressors, taskmasters, robbers, and murderers. They would have been flagrant violators of their own laws, which forbade all these crimes. But they were the directly constituted agents of God to execute orders which He had a right to give. The ancient Canaanites were doomed. They had to be exterminated, root and branch. And for two reasons —first, directly because of their sins, which were so beastly and outrageous as to be unnamable here; and second, indirectly, lest if they remained Israel should fall into the same bestialities. And this they did in every instance in which they failed to act as God's agents to exterminate the possessors of the land. The Canaanites must go, and the God who gave them both their lives and possessions in trust must determine the manner of their going. He can send fire and pestilence, as in other instances, or He can commission men as His agents to expel them.

But if the land of Canaan must be set apart for the children of Israel, why did not God drive out the Canaanites by storm, pestilence, or other natural agency, instead of educating Israel in the cruelties of war, the savageries of blood, and the horrors of slavery? He had a right, we all admit, to destroy the Canaanites, even though they had been righteous; for sooner or later they must all

go down under God's universal law of death. Whether by one means or another, it was still God's act. No less, then, had He the right to destroy them because of their unparalleled and unnamable wickedness, and to make room for a people over whom He had kept providential watch for centuries, and whom by a long process of education He was preparing to be the medium of a great revelation to mankind.

But why destroy the Canaanites by human hands rather than by some great convulsion of nature? What had war and slavery, with their unspeakable horrors, to do with Israel's education for a high and holy mission? Why this long and painful process of education? Why did not God, with whom a miracle is so easy, says the agnostic, make Israel at once what He wanted them to be, and be done with it? Simply because He could not. God can make sticks and stones the way He wants them, and so they will remain; but He can not make two and two five, for then it would no longer be two and two. He can take two things and two more things, and by His omnipotence produce five things, but the five things are not the two and two things, and omnipotence can not make it so. He can not make parallel lines meet, for they would no longer be parallel. He can not make men virtuous against their wills, for they would no longer be men.

Moreover, education everywhere is a process of steps, and not a sudden bridging of extremes. And

God Himself does not in nature at a single stroke make roses of buds, trees of saplings, or men of babes. If the agnostic is willing to give nature unlimited time in which to develop a savage from a lower animal, he ought not to begrudge the God of nature a few hundred years in accomplishing a mightier task. For I do not hesitate to say that the gulf between an animal and a savage is not so wide or so difficult to bridge, as the gulf between the Hebrew freedman as he emerged from generations of unmitigated slavery, and the intelligent, pure, and holy man, toward which Christian civilization is now tending, and which is but the continued unfolding of God's ancient plan of education. The agnostic is firing into his own guns when he finds fault with God for following the same plan in revelation that He follows in nature—namely, the plan of evolution—the plan of steps instead of leaps.

But why this evolution through the horrors of war and slavery, rather than through the agency of insensitive means, such as natural agents? This is the old question, made new by the rhetoric of the agnostic. Will it soften the savage hearts of Israel to redden their hands with human blood? Will it give them a higher conception of the sacredness of human life to destroy it by wholesale? Will it increase their respect for the rights of others to liberty to make slaves of their fellows? Will it serve to illustrate the inalienable right of a man to the product of his own hand and brain to take it

away by force? How are you going to educate a man to be law-abiding by compelling him to be a constant violator of the law? That is the agnostic's question.

And here again I say that the final answer to this question, as to the one preceding, is the answer of faith. We can not see enough of the universe to say that God's plan in this regard was not best. But we can see enough to say that God will do right, and that it is sufficient evidence of the wisdom of any plan to know that it is the plan of God.

Nevertheless, it is not difficult to see how even the horrible spectacle of oppression, slavery, and war might serve to lift Israel more rapidly and surely toward a better and higher development. It served to teach them most effectually the heinousness of sin; and God's choice of them to execute His laws against the Canaanites, steeped as they were in unutterable wickedness, kept constantly before their gaze the inviolability of His law. If the reeking sword and the clanking chain are so horrible, what must be the sinfulness of sins that call forth the sword and chain! Israel was confronted with a continuous object lesson showing the heinousness of sin in the eyes of God. The hangman may blunt his sensibilities by the frequency of his work, but his respect for law and his abhorrence of crime will only grow deeper as the years go on. Israel well knew that what they did as the agents of Jehovah they could not do as individuals without violating the very laws which, as

agents, they were enforcing. God was not training them as murderers and taskmasters, but He was training them to hate murder and slavery. Society is not training the judge and the executioner in murder, or the prison officer in oppression, but it delegates them to show to the people the majesty and sacredness of law. And even at this long distance from those ancient horrors, we exclaim: "How great must be God's abhorrence of sin, if He will make men as well as nature His agents for its punishment!"

Ancient Israel had been slaves for generations. They came out of their bondage debased, ignorant, sensual, animal, brutal; and God simply had to do the best He could with them. He could not train them by the methods He would use under the civilization of the twentieth century. God was compelled to "wink at their ignorance," and adapt His methods to their capacity. You can not train a lion by the methods of a lamb. Love, confidence, tenderness, and the like, all have their place in education; but there must be something in those to be educated to respond to these sentiments, or education will be a failure. Physical force in a den of lions is safer than affectionate caresses. Love may look into the viper's eyes only to receive its death wound. Education can proceed only in harmony with environment. A magnet will not lift a splinter, though it will lift a ton of steel. The splinter does not know the magnet. Ancient Israel did not know beauty, tenderness, and lofty sentiment, and God could not

do otherwise than begin with them where they were, and adapt His methods of education to their feeble capacity for truth.

Thus disappear all the moral objections against the God of the Bible in His dealings with men in this world.

But the agnostic raises his chief objection against the moral character of God, because of His proposed dealings with men in the world to come. He hates hell, he says; and so do I; but neither of us can hate it out of existence. If hate were an exterminator, how many things you and I would exterminate this very moment! I hate murder, treachery, oppression, robbery, tyranny, slavery, sin, but here they are in spite of my hate. Hell is already here. Men do not need to wait for the hereafter to encounter its flames. The majority of mankind are already in its fires. But the hell of the future is not the one depicted in such lurid color by the rhetoric of the agnostic, and long ago rejected by intelligent Christians. There is no hell, here or hereafter, other than that whose flames are kindled by the law of sowing and reaping. That is the hell of science as well as of the Bible. "Whatsoever a man soweth, that shall he also reap," is the verdict of science as well as of revelation. Hell has already come into the universe, because sin has come; and it will stay as long as sin endures. Why sin came, I do not know; neither does the agnostic;

but it is here. A fact is a fact, whichever way it looks, and sin and hell are facts.

The agnostic says that he will not believe in a God who has made hell possible. He prefers to go to hell, rather than live in heaven with such a God. Does he refuse to believe in nature, which has made the Chicago fire possible; and when the conflagration breaks out in that city, does he take the first train to Chicago that he may burn in its flames, rather than dwell in the heaven of his happy home, under the smiles of nature which has made possible such a conflagration?

The Gordian knot which we are to untie is the present hell, rather than the future one. Sin and suffering are already here; and as long as sin remains, suffering must remain. The Christian is under no more obligation to account for the present hell than is the agnostic; for God or no God, the world is already in its flames. And whoever accounts for the hell on earth will equally account for the hell to come; for they are both, alike, the outcome of the law that sin and suffering can not be divorced in this world or in any other. The fires of hell can not go out until sin disappears from the universe. The agnostic exalts science, but science proclaims that hell must be eternal, if sin be eternal.

Thus all the *moral objections* against Jehovah vanish, whether they relate to His government here or hereafter.

II.

There remain now to be considered the *intellectual objections* against the revelation of God. I may put all the alleged intellectual shortcomings of the Bible under one general charge, namely, that it is *unscientific*. It is unscientific because, as alleged, *it is not in harmony with well-known facts of science; it is unnatural, it is superstitious*, and *it is not adapted to the work it proposes to accomplish.*

If any of these specifications be true, the Bible scheme is, without doubt, to that extent unscientific. But what are the facts?

Let me reiterate that the Bible did not come to teach science, but to teach men concerning duty and destiny. If the Biblical writers speak of science to illustrate their spiritual truths, it is only incidental to their main message; but if the illustration is to mean anything to men, it must, in the main, be translatable into the changing and advancing science of succeeding generations, while to some extent it must be incomprehensible by each generation until the teaching of science shall become authoritative and final. If it flatly contradict the established science of any one generation, it can not claim the sanction of that generation to the spiritual message; though it may afterwards appear that the science of that generation was wrong and the Bible right. But it may so state both the material and the spiritual messages as to contain the germs of truth to

be discovered and understood by succeeding generations.

It is very evident that the spiritual message was not fully understood by those to whom it was given, but contained latent truth that has been coming to view during the advancing stages of humanity; and it is also evident that we of this age do not see the full sweep of the spiritual message, even of the ancient prophets, much less the message of Jesus. The spiritual message to mankind has seemed at times to contradict their spiritual conceptions; but as their spiritual horizon widened they saw as the truth what had once seemed a contradiction.

So it may be in the incidental scientific allusions of the Scriptures. What seemed more or less conflicting in one generation, might seem harmonious in succeeding generations. Great germinal physical truths, somewhat obscurely and panoramically stated, and so far as details are concerned not too far in advance of the science of the ancient times, may in the later generations emerge from obscurity into clearer view.

Let us, therefore, clearly see that the Bible does not pose as a text-book in natural science, and is not to be judged by its incomplete material revelations; that in so far as it does go out into the physical realm, its incursions are only incidental to its main purpose; that in so far as it does make such incidental allusions, they may on the surface contain what seem to be the vague conceptions of

contemporaneous knowledge, but they may in fact contain the germs of truth that shall develop during succeeding generations.

Further, it does not follow that the inspired writers, themselves, understood the full sweep of the truth they uttered, whether it be material or spiritual. What writer of any age of the world ever saw to the end of any truth he may have started on its mission? The ancient writers may have subjectively been in error as to their own views of the real essence of their messages, whether material or spiritual. Moses may have thought the "day" of creation to be twenty-four hours; and his conception of loving one's neighbor may have fallen far short of Christ's conception of that far-reaching duty. But the germ of the final word is wrapped up in the statement of man's duty to his fellow-man in the Decalogue; and equally the germ of the final word of science may be hidden in his few majestic words concerning the panorama of creation. Let us for a moment see whether any of his germinal truth has unfolded during recent years.

1. First, does the Bible conflict with *any known facts of science?*

The agnostic claims, as the chief instance, that the Mosaic account of creation is not in harmony with the facts of modern science. Now, if it can be clearly shown that Moses made a mistake in his brief history of the origin of the universe, he was not to that extent inspired by an omniscient God.

But if it shall appear that his account, as far as understood, agrees with the facts, as far as understood, this alone would be overwhelming proof that he must have been supernaturally inspired. For the best astronomical, geological, and biological knowledge of the age, contemporaneous with Moses, was a chaotic mass of ignorance. If Moses gave an account of the creation which does not conflict with what modern science knows about the matter, it was more than any of his contemporaries could have done; and if his account shall yet be found to be in harmony with future discoveries of science, it is an achievement which the historians in the blaze of the twentieth century can not accomplish. Nothing short of omniscient inspiration could have prevented a historian of three thousand years ago from falling into humiliating and stupendous blunders, if he undertook to describe the creation of the worlds. If he speak of astronomy, all the mathematics, physics, and chemistry of the approaching centuries will throw their light upon his declarations. He had not dreamed of the telescope or spectroscope, and yet they will find him out if he make the slightest mistake concerning the remotest star. If he speak of geology, and make the least deviation from the facts, the upturned strata of the coming centuries will witness against him. If he speak of the origin of life, the microscope will search among the atoms for a blunder.

The history of science, like the record of all

things human, has been, in part, a history of mistakes, and in further part, a history of the correction of these mistakes by making new ones. The foremost scientist in any generation, past or present, can not fully write the science of his next generation, much less that of a hundred generations to come. If the account of Moses, as far as it goes, does not conflict with what the twentieth century knows of the origin of the universe, it was more than a human history.

I do not forget or ignore what the higher criticism has to say of the Mosaic records. But whatever may finally be the outcome of the higher criticism, one thing remains: somebody wrote those records; and another thing equally remains: whoever wrote them, whether he knew it or not, anticipated in a remarkable way the science of the twentieth century. Moses gives an account of the Creation in progressive stages which, so far as clearly understood, are in harmony with some of the latest declarations of science. The science of the past few centuries has, time and again, collided with Moses, but in certain instances it has appeared either that science itself, in that regard, was wrong, and Moses was right, or that a legitimate interpretation of Moses did not conflict with the certainties of science.

One of the glaring inconsistencies in the Mosaic account which science could not reconcile and which troubled the candid inquirer was the creation of light

before the sun. Light came during the first stage, while the sun did not appear till the fourth stage.

If you and I had written an account of the Creation three thousand years ago, we should not have committed the blunder of Moses in apparently getting the effect before the cause! If you and I had written an account of the Creation less than a century ago, we should not have fallen on the seeming mistake of Moses, for even then we should have created light and the sun simultaneously! But we should have been wrong, for Moses, whether he understood it or not, was right. It was either a remarkable piece of good fortune that Moses stumbled upon the fact—a wild guess—or he was divinely inspired to make a statement wholly at variance with his contemporary knowledge and with subsequent science down almost to the present generation. He saw, or seemed to see, without a telescope or spectroscope, what the present generation has discovered with one. The nebular hypothesis demands the appearance of light before the sun himself; and what took place in our system during the ages of which Moses wrote is now taking place in other parts of the universe under our very eyes. We do not need to go back to the time of which Moses wrote, for there are universes now in process of evolution before our eyes, in which light has dawned, but whose blazing suns will not appear for eons to come.

Go out with me on a winter night and look at

the magnificent constellation of Orion. With the naked eye we see something besides the stars of that beautiful group. We see a hazy patch of nebulous light. Is that cloud of light composed of stars so far away that they seem to touch? That is what the astronomers used to teach. Turn on the telescope. Still it appears as a cloud of light, and not as a group of stars. Perhaps they may yet be stars so remote that the telescope can not resolve them. Even that is what the astronomers taught when the telescope failed to separate them. Catch the light in the spectroscope, for that will unveil the mystery. Lo, it is not an assemblage of suns, but a nebulous mass of cloudy matter in the process of becoming a sun. It is the first day in that evolving system. God has already said in that remote region, "Let there be light," for we see it even here; but there is yet no sun. It is now only the closing period of the first stage, or day, in the development of that new universe, at the beginning of which the system "was without form, and void, and darkness was upon the face of the deep."

Science can trace some of the remaining steps that are yet to be taken yonder in the eons to come. The central mass now visible to us will yet become a fiery globe like our sun; but that will be long after other things have come to pass in that distant universe. That revolving mass of nebulous matter has either already thrown off rings, or will yet throw off rings, that will condense into worlds like ours.

And God will say in the second stage, "Let there be a firmament in the midst of the waters," and the atmosphere of these new worlds will be cleared of its mists, and the waters will settle to their places in the great deeps.

And in the third stage He will say, although science can not see how, "Let the worlds bring forth life," and vegetation will appear, born of the glowing heat and light of the condensing central mass of nebulous matter from which the young worlds had already sprung.

And in the fourth stage He will say, for science can see this vision, "Let there be lights in the firmament, the sun for the day and the moons for the night;" for by the time that fourth stage shall have come in the sweep of the far-off future the nebulous mass will have condensed into a burning sun, long after the edict of Almighty God had gone forth: "Let there be light."

This is as far as science can clearly see, but with the eye of Moses it may penetrate still farther into the remoter future and see the fifth stage, in which God shall say, "Let the seas bring forth life;" and living creatures will appear.

And with the Mosaic vision, science may catch glimpses even of the sixth stage, in the beginning of which God shall say, "Let the worlds bring forth beast and cattle and creeping things;" and the obedient orbs will teem with life, sprung at the Divine command from lower forms. Yea, with Mosaic

eye, science may peer even to the ending of the sixth stage, when God shall say, as only God can say, "Let us make beings in our image and after our likeness;" and lo, a Godlike race of immortals will appear.

When Moses wrote the history of the successive stages of Creation, he wrote nothing that conflicts with the science of the opening years of the twentieth century, provided we compare what we understand of his history with what science knows to be true. Moses is not incorrect up to date. There are some obscure things in his account that seem to conflict with some obscure things in science; but when the obscurity in both cases shall disappear in the light of future discoveries, we may expect to see the apparent conflicts disappear, as others have done in the light of past discovery.

The other alleged instances of conflict, presented by the agnostic, between the Bible and the known facts of science, are trivial and unworthy, such as the charge that the Bible teaches that the world is flat, that the earth is the center and the sun revolves about it, and the like. The Bible simply uses the common language of appearances, precisely as does the agnostic himself, and the science which he glorifies. He speaks of the rising and the setting of the sun, and so does every scientific writer of this age; do they still believe the world flat, and the center of the universe? Whatever may have been the ignorance of the sacred writers themselves concerning the course

of nature, their inspired accounts are, for the most part, easily squared with present knowledge, and that without violent interpretation.

2. The agnostic charges that the Bible is unscientific, because it is *unnatural*. That is, it rests its claims on the "fraud" of miracles. "A miracle," he says, "is the badge and brand of fraud. No miracle ever was performed." A miracle is unnatural, he claims, and, therefore, unscientific.

Now, I am not going over the arguments for, and against miracles. Mr. Hume put the case against them as strongly as it can be done, and his argument has been torn to pieces a thousand times since his day. Not a shred of it remains. I have something better to do than to dig up the bones of a dead issue. I am here on a living issue, and with the latest word of science; and I undertake to say that if a miracle is unscientific, then science itself is unscientific; for of all the miracles in the history of the visible universe, those demanded by science are the most stupendous. The standing still of the sun on Gibeon, the lifting up of the waves of the Red Sea, the gushing forth of water from dry rocks, the healing of lepers—yea, even the raising of the dead—all of these are insignificant in comparison with the standing miracle of the visible universe itself with which science is concerned.

Whence came the universe that confronts us, and of which we are a part? Science is unable to account for it except by an infinite miracle. I am

not speaking of theology now, but of science. And I am speaking of that branch of science whose most extravagant dictum we are accustomed to accept as an incontrovertible truth,—I mean the science of mathematics. Mathematics can not account for the visible universe unless by a stupendous miracle. Let us see. I shall use familiar words, rather than the technical terms of science.

Mathematics is unable to account for the present high temperature of the sun without a miracle. That is, the sun is hotter than he ought to be if his heat has come from known sources alone. All the heat of the sun, with insignificant exception, is the direct result of the contraction of his gaseous mass. But the sun is vastly hotter than this contraction can explain. Mathematics indicates that he has already parted with more heat than he ever could have possessed as the result of known forces.

It is a fact beyond question that the visible universe is parting with its heat. The planets are radiating it in every direction, and only an infinitesimal fraction of it is being returned by reflection or re-radiation from the orbs of space. The sun himself is radiating heat at an enormous rate, only an inappreciable part of which is returned to his diminished store. What is true of the sun and planets in this respect, is true of all suns and systems of worlds. The visible universe is, therefore, losing its heat. If it is now losing its heat, then, by the law of continuity, the same was true a thou-

sand years ago and a thousand ages ago. Indeed, if the visible universe has existed from eternity, the loss must have been going on forever.

Now, it is well-known that a gaseous body in a free space grows hotter by cooling. This is how it occurs: Assume such a body acted on by no forces except its own gravity and the heat of its molecules. It radiates heat into the surrounding space and at once becomes cooler. Immediately upon this loss of heat, the gravity of the mass, having less repulsive force to oppose, draws the particles nearer to the center. That is, the gas contracts, and it does so by a fall of its particles toward the center. The body thereby becomes denser, and the average heat of its particles is accordingly increased. The visible motion of the atoms in falling is transformed into heat when the fall ceases; and mathematics easily shows that the gain of temperature in the contraction is greater than the loss of temperature which occasioned the contraction. A gaseous body, then, upon cooling contracts, and upon contracting grows warmer than it was before the contraction occurred; and thus the temperature will steadily rise until near the time when the mass begins to liquefy. After liquefaction, the body will lose heat more rapidly than the contraction can restore it.

If the sun be a perfect gas, he will continue to contract and grow hotter thereby until he approaches a liquid state. Then radiation of heat will take place more rapidly than contraction can restore it, and the

great luminary will begin to grow cooler. Until that time comes—if it has not already come—the sun must grow hotter. If he has already reached or passed that stage, then at some time past, while yet a gas, he reached his maximum temperature.

Beginning at that time and going backward, we find the sun in this reverse process expanding and growing cooler the farther back we go. Let us carry this process backward to the time when the sun filled all the space out to Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and perhaps crowding closely upon the territory of the nearest star. He was then very large, but relatively cold.

Now, the heat of the sun at the present time should at least be equal to the amount generated by the fall of these particles through this immense space to their present position in the sun, less the amount of heat radiated into space during the entire time of the fall, or contraction.

The larger the original dimensions of the sun, the greater will have been the amount of heat generated by the fall; but it can be readily shown that if the sun originally filled infinite space—which he could not have done—and had been contracting and rising in temperature from all eternity, the total amount of heat generated during the infinite period of contraction would be finite. Moreover, it is calculated within a reasonable degree of approximation that the total amount of heat generated during an

eternal contraction of the sun down to his present dimensions, would have been eighteen million times the amount of heat which he now radiates in one year. It is also believed by astronomers that the annual radiation of heat during the past eighteen million years of the sun's existence could not, on an average, have been less than the annual radiation at the present time. Professor Newcomb thinks that the radiation was greater.

We are thus driven to the astounding conclusion that the sun must have been contracting forever in order to have supplied the radiation of heat that has been expended during only the last eighteen million years.

That is, the actual expenditure of heat during the last eighteen million years would have exhausted the total supply of heat produced by an eternal condensation, leaving none of that heat for radiation before or after this epoch of eighteen million years. But the sun was, without doubt, radiating heat at a rapid rate before this epoch began, and will continue the radiation for ages yet to come.

That is, the sun must have existed from eternity, in order to have existed only during the past eighteen million years!

That is, the sun must have existed forever before he began to exist at all!

In order, therefore, to relieve this absurdity, mathematics can not find any ground except that a miracle by which this excess of heat was supplied,

must at some time in the finite past have been wrought upon the sun, provided he has existed forever; or that the miracle of creation must have brought forth the sun at a period in the finite past.

What is thus true of our sun, would seem to be true of all suns. That is, either the visible universe existed eternally before it began to exist at all, or a miracle of creation was wrought in the finite past. The visible universe is either an infinite miracle or an infinite absurdity. When it comes to a choice between a miracle and an absurdity, I will take the miracle and leave the absurdity for the agnostic.

I will not consume your time by showing, as science most conclusively shows and demands, that whatever may have been the manner of man's origin or of the origin of the various species, the original advent of life into the universe must also have been a miracle.

Here, then, are the two greatest miracles in the history of the visible universe: the original appearance of the universe itself, and the original advent of life, miracles which science itself can not gainsay. A miracle, therefore, is not necessarily unscientific, and the Bible may rest on miracles without clashing with science.

3. The agnostic charges that the scheme of revelation is unscientific, because it is *superstitious:* that is, it rests on faith. When it can not see any farther, it simply shuts its eyes and trusts. Now,

if shutting one's eyes and trusting when one has reached the limits of his vision be superstition, then the agnostic is as superstitious as St. Paul, and science is as superstitious as the Christian scheme.

If faith be unscientific, science is unscientific; and the agnostic who exalts science and ridicules faith is equally unscientific. The great agnostic himself never took a step that was not based on faith. He never performed an act that was not founded in faith. He never withdrew himself into a state of passivity so extreme as to get beyond the domain of faith. He never ascended the heights of reason so far as to get out of the atmosphere of faith. His memory never carried him back beyond the beginning of faith. His imagination could not outrun or outfly faith. His intuition could not penetrate so deeply into the invisible essence of things as not to find faith already there waiting for its coming. Yea, every moment of his life, sleeping or waking, he exercised the same faith that the Christian scheme demands of the children of God,—the very faith which he stigmatized as childish, superstitious, and fetish; the faith, not merely of belief, but of trust.

> "There is no unbelief;
> Whoever plants a seed beneath the sod
> And waits to see it push away the clod,
> He trusts in God.
>
> There is no unbelief;
> Whoever says, when clouds are in the sky,
> 'Be patient, heart,' light breaking by and by,
> Trusts the Most High.

There is no unbelief;
Whoever sees 'neath winter's field of snow
The silent harvest of the future grow,
God's power must know.

There is no unbelief;
Whoever lies down on his couch to sleep,
Content to lock each sense in slumber deep,
Knows God will keep.

There is no unbelief;
Whoever says 'To-morrow,' 'The Unknown,'
'The Future,' trusts that power alone
He dares disown.

There is no unbelief;
The heart that looks on when the eyelids close
And dares to live when life has only woes,
God's comfort knows.

There is no unbelief;
And day by day and night unconsciously
The heart lives by that faith that lips deny—
God knoweth why."

Either let the agnostic withdraw the charge of superstition against the Christian scheme, or let his anathemas fall upon his own head.

And science itself—it can not take a step without faith. Science raises the level of human knowledge by induction, and by induction alone; and the very essence of induction is faith—faith in the uniformity of nature and the continuity of its processes. Science writes the history of the universe by faith. Science pursues its present processes by faith. Science predicts the future by faith. For all of

the great laws of nature discovered by science were reached by induction, and they still stand by faith.

Moreover, some of the postulates of science produce a greater strain on faith than do any of the postulates of the Christian scheme.

No scientific scholar doubts the reality of Newton's great law of gravitation, and yet that law demands a contradiction, namely, that matter can act where it is not. Every atom in the universe, by Newton's law, acts instantaneously on every other atom, whether near or remote. It is a hopeless contradiction that an atom can act where it is not; science itself recognizes the absurdity; but in spite of the contradiction, the world of science accepts the law because it explains the facts.

The molecular theory of physics demands a quality in the atoms which contradicts our experience, namely, perfect elasticity, a property which we know does not exist in matter as it is presented to our senses. Science perceives the anomaly but accepts the law, because it is a satisfactory working hypothesis.

But perhaps the wildest postulate of modern science is the existence of the ethereal medium, or ether of space, through which heat, light, and other forms of energy are transmitted. This ether is assumed to be an adamantine solid, more rigid than steel, and yet more pliable than air. Did you ever see such a solid? Suppose Moses had described such a solid! It is infinitely elastic and yet infinitely rare

or diffuse—two qualities which are hopelessly contradictory. We live in it, and move through it; but it offers no apparent resistance. This contradiction of thought, this stupendous absurdity, fills all space, even between the atoms. The worlds fly through it in their orbits, but are not appreciably impeded. It is infinitely tenacious, and yet it pours around us like the rarest gas. This apparent and utter impossibility and irreconcilable contradiction of modern science is accepted, believed in, defended and sworn by, because it explains the facts of heat and light. No postulate of science is too absurd or too impossible, provided it serve as a good working hypothesis.

Yet the agnostic stumbles at a few mysteries in the Christian scheme—mysteries that presume less on credulity than do the mysteries of science; mysteries that strain faith less than do the mysteries of science; contradictions which vanish as insignificant when set alongside the contradictions of science. It is all right for science to bow down and worship a contradiction if it happen to furnish a good working hypothesis; but it is superstitious for religion to insist on an apparent contradiction, even though it furnish the only working hypothesis by which the human race can be redeemed. In the name of science I declare that the alleged contradictions in the law of gravitation, the molecular law of physics, and the ether of space are only seeming contradictions; for they are working hypotheses

which reveal the truth of nature, and they must in some unseen way be in harmony with nature. And in the name of the Christian religion I declare that the alleged inconsistencies of the Bible are only seeming conflicts, for the Christian scheme is a working hypothesis which reveals the truth of God in the upward trend of the nations that have come under its sway. The Christian scheme, however mysterious in some of its parts, fits in with the scheme of human nature, and can not, therefore, be self-contradictory.

A working hypothesis in science is one which must be able to prophesy, and the working hypothesis of Christianity is the prophecy of the ultimate redemption and elevation of the human race and of an immortal destiny for the individual soul.

If science is not unscientific because it rests on faith, the Christian religion may safely rest upon the same foundation.

4. All the remaining so-called scientific objections against the Christian scheme can be summed up under the charge that *it is not adapted to the work which it sets out to do.*

The essence of the Gospel is self-sacrifice, and the agnostic condemns the philosophy of self-sacrifice as taught by Jesus. He says that it is impracticable, absurd, and impossible.

That it is neither impracticable, absurd, nor impossible, plainly appears when we look at the Author and Exemplifier of the philosophy of self-sacrifice. A thing which has been done is neither absurd nor

impossible. The absurdity lies in the charge of absurdity. Jesus Christ asks men to do what He did—no more; namely, to sacrifice themselves for others. He asks men to weep tears which else had been wept by others; to endure pain which else had been endured by others; to forego pleasures which else had been foregone by others, and, if necessary, to pass through deaths which else must have been suffered by others. And if the world of mankind should now, at the opening of the twentieth century, universally begin to practice the philosophy of self-sacrifice as Jesus practiced it and as He commands men to do, how long, think you, before strikes would cease; before the social questions would solve themselves; before war, slavery, and oppression would disappear, and before the millennium of universal justice, liberty, brotherhood, and love would dawn upon the race?

The agnostic objects to Jesus because His philosophy is passive and non-resisting, and, therefore, because it is not adapted to the environment in which it must work. Do not be confused. The philosophy of Jesus is passive and non-resisting only as between man and man, when their selfish interests seem to clash. In such a case, each is to give way to the other. But it is not passive and non-resisting when truth faces error, when right faces wrong, when human liberty faces slavery, and when the good of the race is threatened by the sword of evil. Then comes the day of battle, in which the man who would

die for the sake of his fellow must thrust forth his sword for the sake of truth. The man who sacrifices himself for others is no more an exponent of the gospel of self-sacrifice than the man who will fight to the end lest truth, right, and liberty be sent to their graves. There must be war in the universe until wrong goes down to its fathomless grave. Here is the philosophy of the Gospel—self-crucifixion as between man and man, but self-assertion as between the eternal right and the eternal wrong.

The proof of a working hypothesis is in the way it works. There is no demonstration like success. Wherever the Christian philosophy has had its way, both nations and individuals have been exalted to a plane of unexampled prosperity; and all this in spite of the unnamable horrors and corruptions that have been practiced along the highway of history in the name of the Gospel, by men who wore the cloak of Christianity, but who never knew its spirit.

I know that the agnostic intimates that silk hats and suspenders have had as much to do with Western civilization as Bibles and churches; but the world will be slow to accept his view until he shows how the silk hat and suspender philosophy has in it the promise and potency of a grand civilization. So far as the philosophy of the hat and the suspender contains within itself the elements that tend to civilize, so far will I give credit to the hat and suspender civilization. And while the Gospel contains the essence of all that is good in the new civilization as

it now exists, and the essence of a newer and better civilization yet to come, the world will not be deceived by the cry of silk hats and suspenders.

After all, the test of a philosophy is in its outcome. Suppose a consignment of silk hats and suspenders had been sent out nineteen centuries ago from Jerusalem to the Western world. Is it likely the present civilization would have been the outcome? But something was sent out which took hold of the consciences and intellects of men, and wherever it went a new civilization appeared, and men began to grasp the sublime truth of universal brotherhood. It took hold upon the hearts as well as the brains of the people and found therein a response to its innermost essence. I know that Mohammedanism spread rapidly, but it spread before the sword and not before the unarmed truth. But there were no swords for the establishment and propagation of the Gospel. It needed none. It opened its own way into the wills of men. The more intelligent men become, the more rapidly they come under the sway of its philosophy. During the nineteenth century, when modern civilization had reached its climax, the philosophy of the Gospel commended itself more cogently to Western intelligence than ever before; and during the years of that century it made greater headway than during all the other eighteen hundred years gone by. During that century, in which by the prophecy of Voltaire Christianity was to be sleeping in its grave, it more than doubled the number of

its followers. Just how long it will require Christianity to die if it continue, as now, to double its forces every century, I leave to the mathematics of agnosticism.

Christianity keeps pace with the progress of history simply because it is adapted to its environment, —and that environment is the intellect, heart, volition, and conscience of humanity. The Author of the Gospel and the Author of the human soul must be one and the same, for the soul and the Gospel fit each other completely; and humanity can never cease to be the half hinge of which the Gospel is the other half, until the constitution of the human soul is reversed.

I have now examined the principal strictures of the great agnostic against the God of the Bible. I have ignored much—his blunders, both historical and scientific, his unfair and overdrawn statements, his half truths which he has stated with such beauty and eloquence as to have the appearance of whole truths, and his many foolish, frivolous, and flippant charges, which can not stand alone. I have overlooked his men of straw that he has taken delight in setting up that he might thereupon knock them down again.

I have overlooked his wit in which he has time and again begged the question while he carried his audience by storm. How easy it is to beg the question in a flash of wit, and then to disguise the fallacy by dazzling the eye with the lightning of the wit!

Here is an instance. He says that, if he had been God, he would have made health catching instead of disease. His auditors have applauded the brilliancy of that sentiment, and failed to discover that he begs the whole question in a flash of wit. Just as if health were not catching! What have you been doing through all these years? The majority of you during the greater part of your lives have scarcely known a pain. You easily remember the isolated instances of discomfort and suffering, but what of those other uncounted moments of ease and enjoyment? You have been catching health by night and by day. You have been catching health from the sweet sleep your Heavenly Father has given you, from the pure air you have breathed, from the cheerfulness and contentment of your fellows, and from God's beneficent laws everywhere.

All these things I have overlooked, but I have frankly endeavored to consider in a calm, comprehensive, and fundamental way, the real essence of his criticisms. If I am wrong and he is right, then man made God. If I am right and he is wrong, then God made man.

* * * * *

Nothing now remains for me to do but to show you the outlook under either case.

If man made God, what is the future? What does agnosticism propose for humanity? It offers nothing but the visible, and the visible does not ex-

tend beyond the present. If there be no God but the one made by men, there is no future either for the race or for the individual.

Take away from all men the ever-present conviction of a supreme Ruler and Judge, and the human race will lapse into barbarism more rapidly than, under this conviction, it has forged its way up the heights of civilization. The agnostic may believe, if he will, that reverence for the unseen Jehovah and the spirit of submission to His will are exploded superstitions, and that they are obstacles in the progress of civilization, discouraging art, science, education, and liberty; but once let the human race lose its reverence for God and deny His authority to rule, and that instant the wheels of civilization will begin to roll backward, and art, science, education, and liberty will vanish more rapidly than they ever grew. If man owes no allegiance to a higher throne than humanity; if there are no checks upon mankind other than those it sees fit to put upon itself; if humanity has to answer to no more authoritative behests than those of its own issuing, then the future of the race is written; its destiny is deterioration, decay, barbarism, savagery, and despair. The hope of the race is its anchorage to the invisible.

And if man made God, what is to be the destiny of the individual? If the whole fabric of immortality, guaranteed by the immutable character and word of Jehovah, vanish into nothingness with the unmaking of a man-made God, what is the promise

for the soul in the worlds to come? What shall make equal the inequalities of this life? What shall render justice to the myriads who lived and died under the smart of injustice? What shall give liberty to the clanking chains of slavery under which the oppressed of all ages went down to their fate? What shall proclaim emancipation to the high spirited and noble minded who chafed under the rod of tyranny? What shall compensate for the relentless poverty, the gnawing hunger, the burning thirst, the biting cold, and the raging fevers, under the horrors of which untold myriads marched from the cradle to the grave? What shall undo the treachery of false friendship, the disappointments of noble ambition, and the failure of hard-wrought plans, at the sight of which so many human hearts have broken? What shall restore the wrecks of hope? What shall give back health to the blight of faith? What shall be the resurrection for the grave of love?

Look down into the grave, and what can the agnostic show you? What comfort can he give you? What hope can he kindle? What pictures of immortality can he paint? What promise can he make to your trembling heart? Behind you is the brief span of life. You loved awhile, but you could not keep the objects of your love. They slipped from your grasp into the grave. Your heart, your life went with them. Ask the agnostic for one word of cheer. He gives you none. The grave is the end. Love is only a reminiscence, and is not to come forth

to greet you beyond the charnel house. The coffin is the goal. They nailed under its lid the faith, hope, love, intellect, conscience, power, and possibility of those you loved. The somber hearse and the mournful funeral train announced the termination of careers—careers begun in time and ended once for all in time. The sexton smothered the fires of immortality under the clods. There is no more music in the universe for those who went or for you who stay. The birds will sing no more. The flowers will never bloom again. The sun will cease to shine. The stars have gone out forever. Truth is dead, and the horrible pall of despair spreads over the soul. Again I say, what shall be the resurrection for the grave of love?

Let the mother, as she catches the first glimpse of the hectic flush on the cheek of her darling, send for the agnostic and beg for a word of consolation. "Fever?" he replies. "Why, it is only the rush of atoms; and those smiles of beauty you once looked upon with ecstasy were only the march of atoms; those childish peals of laughter were only the play of molecules; that instinctive clinging to you for protection in the moments of its terror was only a molecular disturbance; those shafts of love shot forth from its beaming eyes were only the vibrations of the invisible ether. Have courage, dear mother. The atoms will soon take other form, and the child of your heart will after awhile reappear to you in the snowflake, the dewdrop, the rosebud, the lily, the

sting of the adder, the tooth of the lion, and the claw of the tiger." And is that to be the outcome of the hectic flush on the cheek of the mother's darling?

Let the mother, gazing through the coffin lid with eyes that can not weep, ask the agnostic for comfort. "Death," he replies, "it is the end; the end of smiles as well as tears; the end of hope as well as despair; the end of joys as well as sorrows; the end of love as well as hate; the end—*the end*—THE END! Command your molecules, dear mother, to fall in line and to go on obediently with their monotonous rounds, until the next coffin comes into your home, *and the next*, AND THE NEXT, and then, after your heart has broken with despair, you may go to be a fellow atom with your child in the busy laboratory of the world."

And once again, I say, what shall roll away the stone from the door of love's sepulcher? Call upon the agnostic for the answer. What does he say? What can he say? What must he say? The only answer he can give is the wild wail of despair.

What mean the irrepressible yearnings of the soul for a destiny? What means the instinct of God and immortality that can not be scourged from the soul by centuries of the lash, that can not be educated from the soul by ages of culture, that can not be dazzled or outshone in the soul by the enkindling of the blaze of intelligence; an instinct that knows neither age nor climate, neither circumstance

nor condition; an ever-present prophet in the soul that speaks of destiny? Is the prophet true, or false? The soul feels within itself the stirrings of immortality, and in the present it reads the promise of a glorious future. But if man made God, that future will never come. The inequalities of life will never be made equal. The stupendous failure of human life will never be undone. The soul sees within itself the prophecy of better things to be, but they will never come. The soul sees within itself an endless destiny as the arena for its new-born powers, but the destiny will never come. The soul ceases in the very act of becoming. Reason, judgment, memory, and imagination shall perish, the will shall relax its grasp, conscience shall become extinct, faith shall fade, hope shall wither, and love shall die.

If man made God, then, after the irreparable failure of life, human destiny is to rot in the grave.

But if God made man, what is destiny? What shall be the destiny of the race? The destiny of the race will be toward a perfect civilization, in which self-assertion for the truth and self-crucifixion for others will be the ideal.

But what shall I say of the destiny of the individual? If man was made by God, his destiny will be in keeping with his origin. Tell me the origin of man, and I will show you his destiny.

We can not tell whither we are going, until we know whence we have come. We can not rise above our source. If we came from matter, to matter we

shall return. If the clods were our origin, the clods will be our destiny. But if we had our origin in the eternal purpose of God, we shall have our endless destiny in Him. If God began thinking about us innumerable ages before we were ushered into being, He will not cease thinking about us, now that we have come.

Go back to the beginning, before sun or moon or star had appeared, when all space was filled with nebulous matter infinitely diffused through measureless lengths and breadths and depths. Suppose God said, "I will make a race of beings like unto Myself. I will not be in haste, but will take the infinite future for the task." So He hid Himself in every atom as a ceaseless force, and began, in its initial stages, the unending work of development. Matter began to move upon itself. By infinitely slow processes the work of condensation went on. But all the time God saw in the far-off future the beginnings of a race of beings that were eventually to approximate His own perfection. Age after age went by; cycle after cycle rolled on. The pendulum of the clock of eternity moved slowly over its infinite arc, and after an infinite number of vibrations, each vibration requiring infinite ages for its majestic sweep, the stars began to form out of chaos. The sun, a seething mass of nebulous matter, his circumference reaching out to the nearest star, took his place where God had decreed in His ancient plan. All this time God was getting a place ready for the coming of some-

thing higher than star-dust and more glorious than the stars. His eternal plan was gradually unfolding. By slow degrees the huge solar mass gathered toward the center, leaving planet after planet behind. And then the earth appeared, fiery like the sun from which it sprang. But every motion of every atom through all these innumerable ages was only a part of the stupendous plan by which a Godlike race of beings was to appear. And then came life by the Divine energy; life in its lowest form; and after untold ages of waiting, a higher form appeared, and still a higher, until at last, by the fiat of omnipotence, man took his place on the earth; man, of whom God had been thinking from eternity, and for whose advent He had prepared the earth by processes of marvelous complexity through cycles of inconceivable duration.

If God has thus taken infinite pains to bring us here, He is not going to withdraw His hand from us at this late day. At this late day? Nay, rather, at this early day; for there is more before us than there is behind us. I have said that we can not tell whither we are going until we know whence we have come. We have come through the eternal purpose of God, working through endless cycles of the past on a scale of inconceivable magnitude; and God alone can tell the measureless heights to which He will yet bring us in the endless unfolding of His plan. If we become dizzy, looking back into the fathomless depths out of which we have sprung, we

are overwhelmed at the still greater heights that tower above us.

Shall we venture to ascend the slope a little way? We have tried to measure the distance between the atom back yonder in the beginning and the living soul now here, and on its way to destiny; but we have found the distance immeasurable. Go forward into the future as far as we have come out of the past, remembering that the rate of progress in the upward sweep of the soul is geometrical and not arithmetical. The onward march of the soul is not at a constant pace, but at an ever-increasing rate. A body falling to the earth passes through sixteen feet the first second, three times that distance the next, five times as much the third, and so on through each succeeding second of its fall. That is what I mean by an increasing rate. The distance through which the body falls would constantly increase, even if the rate of fall remained the same; how much more will the distance of its fall increase when you give it an accelerating rate! If away back in the depths of eternity a body had started from the outer limits of space to fall toward the sun, its rate of approach at first would have been inconceivably slow; but as the ages rolled on, its velocity would have increased with each succeeding instant, until at last it would have darted into the fiery billows of the sun at a rate of appalling speed. The longer a body approaches a center of attraction, the more rapid becomes its approach. With a uniform

velocity, it will, if you give it time enough, pass over an inconceivable distance; how much more so, if its velocity increase as the distances are traversed!

Away back in the eternities when God determined to take the first beginnings in the development of the universe toward beings capable of destiny, how slow and tedious was the progress! But on through the cycles the rate of advance increased, until now we find the human soul, with an infinite distance behind it, reaching back to the eternal purpose of God from which it sprang, and with expanding powers and accelerating pace approaching the unattainable perfections of God to which it shall forever press. God is the center toward which we may tend, and the soul drawn by Him shall sweep on with an increasing rate through the eternity yet to come.

The powers of the soul, already Godlike in their nature, will expand until they become Godlike in their compass. Memory will not be limited to the events of a day, but will seize all of its past in one comprehensive grasp. Perception will not be limited to the narrow circle of contact, but will spread out over an ever-widening horizon. Judgment will not be confined to the comparison of two mental states at a time, but will gather into its view a constantly increasing throng of conceptions. Imagination will not be held to a region determined by five physical senses, but unseen heights will rise before its expanding wings. Reason will not need to climb by slow and painful ascent the steepening summits of

truth, but with Godlike majesty it will "swoop upon the greatest thoughts." The will, center of the soul, will reign with equal poise, its inflexible purpose reaching out into the eternity to come. The conscience, eye of the soul, that gazes unhurt into the eye of God, and through which God gazes back into the soul, will look out upon ever-broadening fields of duty. The spiritual energies of the soul, which have barely commenced their being in the present stage of destiny, and which lift us highest toward kinship with God, will open visions of Jehovah unspeakably more glorious than Moses caught from Sinai. If in forty days of imperfect spiritual vision of God, the natural face of Moses so shone like the sun that the eyes of the people could not endure the reflected brightness, what shall be the glory of our spiritual faces after we have gazed for endless ages upon the very throne of God?

Go on up the heights of the future as far as you have come out of the depths of the past, and you reach the second stage in the destiny of the soul. But stop not there; go still on through other eternities to yet dizzier heights that steepen as they rise, until you have passed through innumerable other equal stages in the advancing destiny of the soul, and having put these unnumbered stages all in one, start on afresh with this infinite combination as the new unit of measurement, and you will find before you still more dizzy slopes that lead up towards the summitless heights of destiny. And if God shall

have brought us thither on the upward scale of destiny, will He then remove His hand?

If man made God, the destiny of the soul is in the clods; but if God made man, the soul will find its destiny in the bosom of the Infinite.

Which will the human race accept,—the philosophy of agnosticism or the philosophy of the Gospel of Jesus Christ?

I have traveled northward on a swiftly speeding train as the sun hung low in the horizon. Trees and telegraph poles sped rapidly to the south, but the sun kept even with the train. Fields of corn and pastures of green went flying southward, but the sun swept northward in majestic movement with the progress of the train. Towns and villages hurried by, and the sun disappeared from sight behind the opposing walls; but when the train reached again the open highway, the sun was still in line. We plunged into long black tunnels, and our traveling companion was lost in the darkness, but scarcely had we emerged from night into the light of day ere the sun shot his beams athwart our track. It requires a fast train to outrun the sun.

Nineteen centuries ago the Gospel appeared on the horizon of human history. The train of the world's progress sweeps down through the centuries, but the Gospel keeps in sight. Yonder flies backward the Roman Empire, with its power, pomp, and magnificence, but the Gospel keeps in line. Yonder, through the black tunnels of the Dark Ages, the

Gospel disappears from view; but as the train of progress emerges from the night of centuries, the first sight that greets the eye of the world is the Gospel, even with the march of history. Yonder go the nations of modern Europe in their flight into the past, but the Gospel remains abreast of the train. Yonder go the men of destiny, hurrying backward into oblivion, but the Gospel, leaving them behind, keeps pace with the train. Yonder go the great infidels of history. I see Hume, loaded down with his argument against miracles, plunging past into obscurity. I see Voltaire, who thought the open grave of Christianity was just in sight,—there he goes into the past, chasing his vagaries among the shadows of oblivion. I see Thomas Paine, the patriot and the scoffer,—yonder he flies with his "Age of Reason" to join the armies of the obsolete. And yonder goes Robert Ingersoll, with his witty lectures on Ghosts and Skulls and Gods, stumbling over his "Mistakes of Moses" into the deep grave of the past, from which no Gabriel of future history will ever call him forth to tender memories. But lo, what is this I behold, still blazing gloriously on the ever-changing horizon of advancing history? It is the Sun of Righteousness, the undying Gospel, still abreast the forefront of the train of human progress.

Whoever or whatever undertakes to outrun the Gospel of Jesus Christ must measure footsteps with the Eternal God.

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